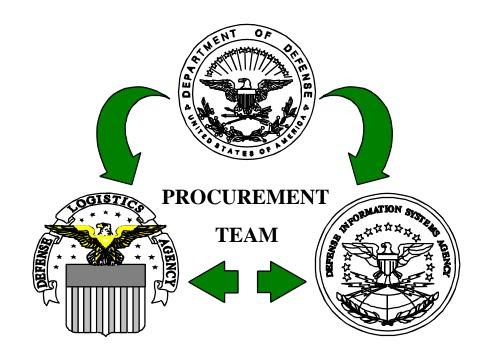
DEPARTMENT OF DEFENSE

STANDARD PROCUREMENT SYSTEM



Milestone II/III (B) Test and Evaluation Master Plan (TEMP)

Defense Procurement Corporate Information Management Systems Center
Defense Logistics Agency
Fort Belvoir, Virginia 22060-6221

June 10, 1997 REVISION 2

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DOD STANDARD PROCUREMENT SYSTEM TEST AND EVALUATION MASTER PLAN

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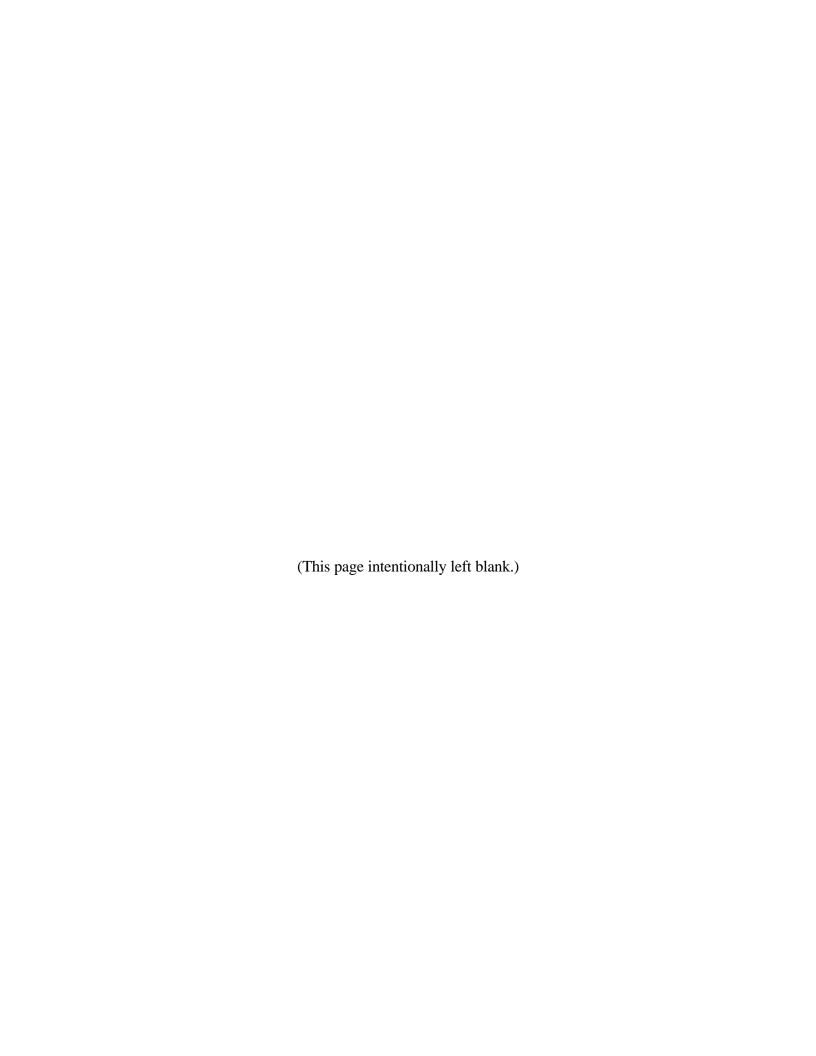
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FOREWORD

This TEMP is the basic planning document for all developmental test and evaluation and operational test and evaluation activities related to DoD Standard Procurement System (SPS), and is used by the Office of the Secretary of Defense (OSD) and all Components in planning, reviewing and approving test activities.

Component representatives shall participate in the development of Functional Requirement Document(s) as the need for SPS application and data bases require integration with the Components' other functional AISs or other functional process improvement required to support successful evaluation and acceptance of commercially proposed solutions to meet SPS requirements.

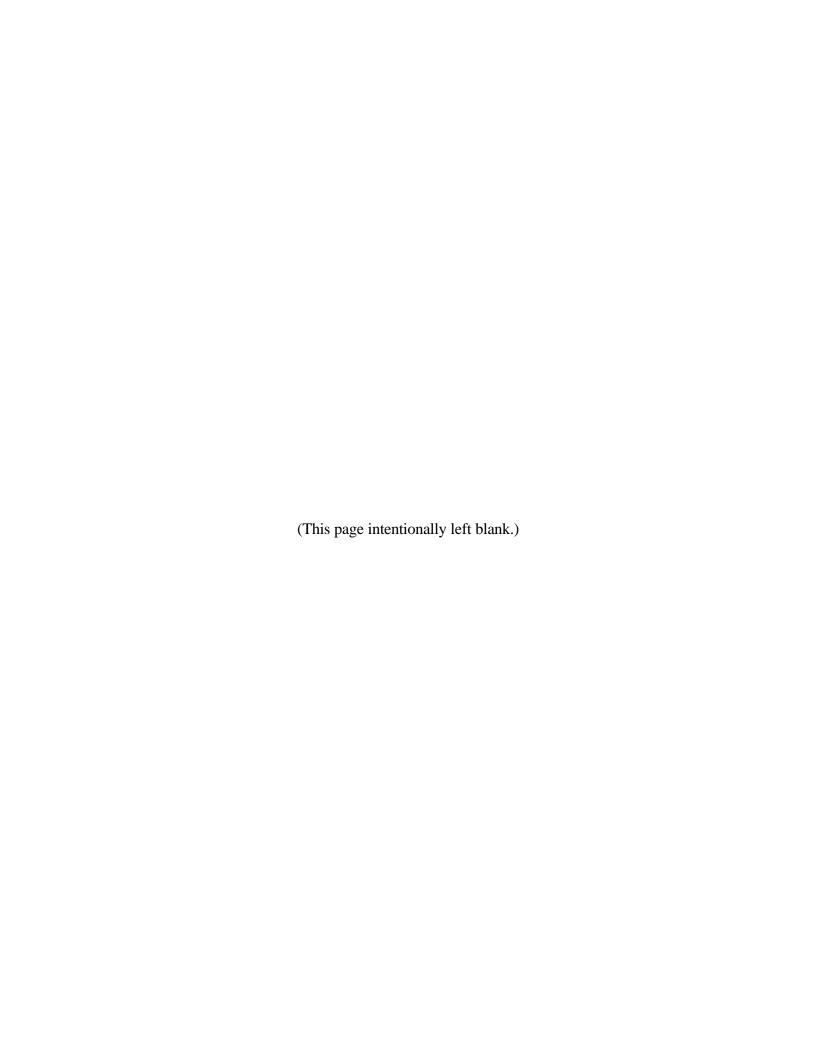
The TEMP complies with DoDD 5000.1, Defense Acquisition, March 15, 1996; DoDI 5000.2 Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs, November 4, 1996; DoD 5000.2-M Defense Acquisition Management Documentation and Reports, March 5, 1993 (Change 1); Director, T&E, OUSD/A&T Memorandum, subject: DT&E Policy Guidance for Software-Intensive Systems in Support of Recommendations from GAO, dated May 23, 1994; OUSD, Operational Test and Evaluation Memorandum, subject: Software Maturity Criteria for Dedicated Operational Test and Evaluation of Software-Intensive Systems, dated May 31, 1994.



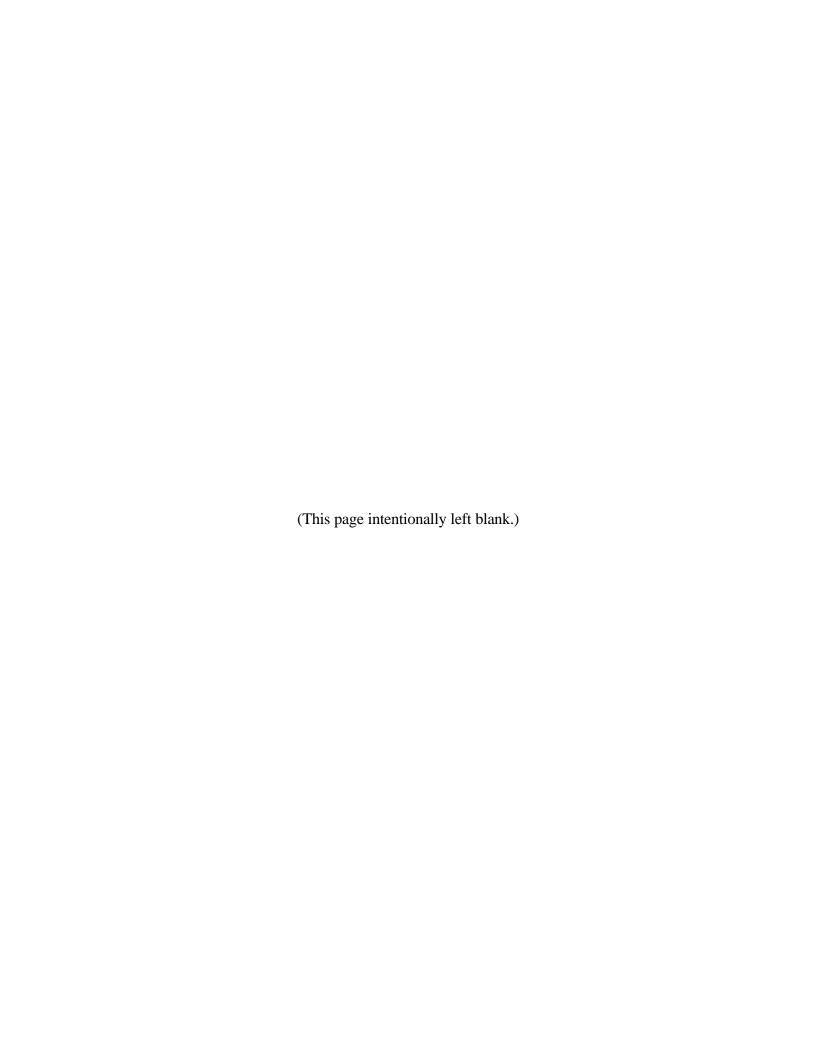
TEST AND EVALUATION MASTER PLAN FOR DOD STANDARD PROCUREMENT SYSTEM

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CONCL	<u>URRENCE</u>
The requirements, plans and resources contained Subsequent updates of this document will update become available. System level characteristics individual SPS projects and operational comport document. In accordance with DoD Instruction Streamlining Act (FASA) and non-developed it of the critical system characteristics and function	and where appropriate, included in this document. In this document are as currently defined. The requirements, plans and resources as the details and functional requirements that are attributable to ments are addressed in separate appendices to this a 5000.2 as it applies to the Federal Acquisition tems, the SPS Council has provided user validation and requirements, which are to be tested under this trust user representatives have reviewed and validated of this plan and the accompanying appendices.
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STANDARD PROCUREMENT SYSTEM

TEST AND EVALUATION MASTER PLAN COORDINATION PAGE

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STANDARD PROCUREMENT SYSTEM TEST AND EVALUATION MASTER PLAN

PART I SYSTEM INTRODUCTION

a. <u>Mission Description</u>.

- (1) The need is documented in the Mission Need Statement (MNS) for the DoD Standard Procurement System (SPS), 3 April 1995.
- (2) The MNS confirms that DoD must improve the efficiency of its automated procurement processes. The improved standard automated DoD procurement processes, with standard, shared, cross-functional data that utilizes current technology, will improve global peacetime and combat support responsiveness, reduce procurement lead time, and increase the accuracy of procurement information. The SPS will enhance the effectiveness of procurement functions, permit more efficient and effective interaction among other DoD activities and with industry, and improve visibility of procurement actions.
- **b.** System Threat Assessment. SPS will be exposed to threats inherent in any system operating in an open system environment. Risks to security of the SPS, as identified in the April 9, 1997 SPS Security Plan, can be divided into those which arise from potential malicious action, from accidents or improper procedures, and from loss of assurance that the system can function as designed and provide the requisite protection.
- (1) Risks from malicious actions include: unauthorized origination of transactions; intentional alteration of transaction contents after origination; false claim of transaction loss between sending and receipt; falsely claimed time of a transaction event; attacks on the key management infrastructure; unauthorized receipt, interception, copying, or viewing of sensitive information; and malicious software replacement or database corruption.
- (2) Risks from accidents or improper procedures include: data communication failures or other sources of error causing corruption of transaction contents after origination; inadvertent or other unauthorized origination of SPS business transactions; real transaction loss or mistaken claims of transaction loss; mistaken claims about times of transaction events; accidental software replacement or data base corruption; and natural disasters.
- (3) Risk from loss of assurance: SPS data protection system does not function as designed to provide required protection.
- **c.** <u>Incremental Delivery Strategy</u>. Competing contractors offered commercial packages intended to meet the SPS Statement of Work requirements. These requirements included functions in procurement planning, solicitation, award, administration, and close-out. Multiple

increments were required to deliver full functionality. Negotiated positions were reached on delivery of functionality in each increment and differed for each contractor, yet all planned to deliver full functionality by Increment 4. A demonstration and validation phase was used to select a single contractor. This strategy was chosen as the best approach to quickly support functional communities who have no automation or are semi-automated and to provide a phased deployment schedule to the remaining automated DoD procurement community. Increment 1 testing was completed and fielding has begun. The follow-on Increments will be tested prior to fielding.

d. <u>Measures of Effectiveness and Suitability</u>. The capabilities and characteristics in the SPS Operational Requirements Document (ORD) (November 22, 1996) are grouped below as measures of effectiveness and suitability. The incremental development concept will provide planned upgrades to reach the objective system capabilities repeated below.

(1) Operational Effectiveness.

(a) System Performance.

 $\underline{1}$ \underline{Data} . The key attributes of system performance that must be achieved are: data accuracy, relevancy, and currency; data edits; single data entry; and data integrity.

1.1 Contract file means the basic contract and all subsequent contract modifications; and the conformed contract file.

1.2 Operational data is the data the SPS application accesses and manipulates to perform the defined automated procurement processes. Operational data includes, but is not limited to, Uniform Contract Format data, clause data, obligation and payment data, contract deliverable data, and contract reporting data, in accordance with the policies and formats mandated by statute, the Federal Acquisition Regulations (FAR), and the Defense Federal Acquisition Regulation Supplements (DFARS).

1.3 Operational database is the means by which the data is stored. The database may be local, regional, in the Shared Data Warehouse (SDW), or some combination thereof. Initially, the operational database will be populated by the SPS application. The objective is to migrate operational data to the SDW for sharing among all procurement users and other functional users who need procurement information. The operational database must be insulated against site specific processing errors and must provide consistent real-time access to contract files.

<u>a Data Accuracy, Relevancy, and Currency</u>. Data accuracy means the data stored in the database is identical to the source information used to populate/update the database. Data relevancy means the database query returns only the information requested. Data currency means the information in the database is the most recent information that has been input to the system.

Threshold: Operational data must be accurate, relevant, and current 98% of the time at Initial Operational Capability (IOC) and 99.5% at Full Operational Capability (FOC).

Objective: Operational data must be accurate, relevant, and current 100% of the time.

<u>b</u> <u>Data Edits</u>. The SPS edit check routines shall identify data that the user attempts to enter in an incorrect format prior to the data being accepted and processed (e.g., contract line item number, contract number, delivery schedule(s), accounting classification record numbers, etc.). The SPS data and application structures must maintain the integrity of the entered data as the data is transported across procurement tasks or used within a shared data environment.

Threshold: The data edits must identify and reject incorrectly entered data for all operational data 98% of the time at IOC and 99.5% at FOC.

Objective: The data edits must identify and reject incorrectly entered data for all operational data 100% of the time.

<u>c</u> <u>Single Data Entry</u>. Single data entry means that once discrete procurement data passes edit checks and is entered into the SPS operational database, no further entry of the same data is required to perform an automated procurement process.

Threshold: Single data entry must be achieved 98% of the time by IOC and 99.5% at FOC.

Objective: Single data entry must be achieved 100% of the time.

<u>d</u> <u>Data Integrity</u>. Data integrity means users cannot alter "read only" data. Data that is permitted to be changed must reflect the most recent update by an authorized user.

Threshold: "Read only" data will not be altered by a routine user manipulation 98% of the time at IOC and at 99.5% of the time at FOC. Changeable data reflects the most recent update by an authorized user 98% of the time at IOC and 99.5% of the time at FOC.

Objective: "Read only" data will not be altered by a routine user manipulation and changeable data reflects the most recent update by an authorized user 100% of the time.

2 <u>Functionality</u>. The SPS application software must support the automated procurement processes from requirements receipt through contract close-out. The

application must be easy to use and must provide repeatable, predictable, correct, and timely responses for each user initiated command. A threshold failure attributable to the inherent performance limitations of the minimum standard client, an application or database server, or the client/server communications connectivity are not intended to be corrected by the SPS application or database, but will be considered in the deployment strategy.

<u>a Full Functionality</u>. The SPS application software must provide the functionality to support all the DoD standard procurement processes identified by the users to be automated. The SPS application software and operational database must accommodate process changes required by statute, policy, or business process reengineering.

Threshold: Must fully support the automated procurement functions contained in each software release that is accepted or conditionally accepted by the government.

Objective: Must support 100% of identified automated procurement functions.

<u>b</u> <u>Ease of Use</u>. Ease of use is directly related to the logical progression of presentation changes to accomplish a procurement task or function after adding all new data, using either a keyboard and/or a mouse as the input device. On-line help files must be accessible from the relevant client presentation. Presentation limitations do not apply when non-SPS software or databases are accessed.

Threshold: Presentation changes must be logical. No more than four presentation changes per task or function.

Objective: Presentation changes must be logical. No more than two presentation changes per task or function.

<u>c</u> <u>Functionality Response</u>. The SPS must provide a repeatable response and must provide acceptable response times to the user. The thresholds assume the government furnished infrastructure meets or exceeds minimum DoD standards.

Thresholds: All functionality must be repeatable with the same client presentation 100% of the time.

The application must be ready to receive a new command within five seconds of exiting the prior command.

The task or function completion at the client must allow entry of subsequent user commands within five seconds.

The task or function must be completed, the operational database updated,

and the user presented with a visual or aural indication within one minute for a simple task, one and one-half minutes for a moderately complex task, and within five minutes for a complex task, print job, or database save. (This is exclusive of any wide or local area network waiting time or printing time.)

Objectives: The client user must receive a visual or aural indication that the task or function process has started within one second, from the time the user completes the initiating command.

> The application must be ready to receive a new command within one second of exiting the prior command.

The task or function must be completed, operational database updated, and the user presented with a visual or aural indication within 30 seconds for a simple task, one minute for a moderately complex task, and within three minutes for a complex task, print job, or database save. (This is exclusive of any wide or local area network waiting time or printing time.)

Reporting. The SPS must provide the capability to electronically prepare mandatory contracting reports in accordance with applicable FAR and DFARS. In addition, the SPS must be capable of producing ad hoc management reports for use by all levels of acquisition managers.

a. Mandatory Contract Reporting. The SPS must provide the capability to electronically prepare individual contract action reports IAW reporting requirements outlined in the FAR/DFARS.

> Threshold: Information must meet mandatory reporting time frames outlined in the FAR/DFARS.

Objective: Information must be available on demand.

b. Ad Hoc Management Reports. The SPS must provide current and historical procurement information (e.g., work load production data, buyer performance, etc.), that can be used as matrix reports to support management decisions. The system must provide easily accessible, tailorable, management information and decision support data for office, command, and Component use.

Threshold: Information must be available on demand.

Objective: Information must be available on demand.

4 System Security. The SPS will have automated data processing security in accordance with applicable directives for classifications, up to and including the C2 level in accordance with DoD 5200.28 (Security Requirements for Automated Information Systems). The SPS detailed security environment will be defined and approved through the security certification and Designated Approving Authority (DAA) accreditation process. Required certification activities including security policy development, risk analysis, and security test and evaluation will be performed in accordance with applicable DoD directives.

Threshold: DAA accreditation that C2 compliance is achievable at IOC.

Objective: Certification that C2 compliance is achieved at FOC.

<u>5</u> On-Line Historical Information. The SPS operational database must provide the on-line capability to receive, store, and retain historical information as required by the FAR/DFARS and allow timely access to data needed for pre- and post-award functions. It must also provide on-line contractor past performance histories.

Threshold: Information must be available on-line.

Objective: Information must be available on-line.

(b) <u>Information Warfare Activities</u>.

1 Information Warfare Activities

1.1 SPS must be able to defend against and survive information warfare attack. To do so, it must provide appropriate electronic access (i.e., adequate levels of security), grant system access to authenticated users, verify self-ID and privileges, provide identification and passwords to users of the system, grant file access and associated privileges only to authorized users to protect system data (e.g., from corruption or any unauthorized write, create, or delete activity).

1.2 It must incorporate restricted ID codes for the purpose of limiting access by the user and regulating the functions that the user can perform, as well as provide automatic log-off after a period of inactivity.

1.3 SPS must identify the origin of information entered into system and provide an audit trail of changes to the document. The system should provide a background capability to save all transactions in the system in an unchangeable history journal log that may be accessed for rebuilding files, for verifying accesses to databases, and for other purposes.

Thresholds and Objectives:

98% at IOC and 100% at FOC rejection of unauthorized access and intrusions.

100% acceptance according to authorization and privileges.

100% rejection of incorrect passwords/IDs.

100% rejection of incorrect functional attempts.

100% log-off after selected time-out duration.

100% protection (rejection of unauthorized attempts).

(2) Operational Suitability.

(a) System Performance.

<u>1</u> <u>Interoperability</u>. SPS must be able to electronically interface with designated DoD non-procurement legacy systems that currently interface with DoD procurement legacy/migration systems. Threshold values relate only to interfaces completed by IOC and FOC respectively.

Threshold: Interoperable with non-procurement legacy systems 98% at IOC and

100% at FOC.

Objective: 100% interoperable with non-procurement systems through the SDW.

<u>2</u> <u>Data Standardization</u>. SPS must accept and process standard data that conform to the definitions in the DoD Standard Data Dictionary. SPS must also accept and process legacy system data that has been converted to operate with SPS. Threshold is based on only those that have been converted correctly.

Threshold: 90% of the standard data and correctly converted data is accepted and

processed.

Objective: 100% of the standard data and correctly converted data is accepted and

processed.

<u>3 Electronic Commerce/Electronic Data Interchange (EC/EDI)</u>. SPS must provide the capability to exchange data electronically between the DoD and industry. SPS must provide an automated environment which is compliant with ANSI X12 EDI standards. Each increment of SPS application and operational database must meet the following threshold for the transaction sets required for delivery with that increment and in accordance with the applicable implementation convention.

Threshold: The user-defined file generated by SPS must be 100% compliant with ANSI X12 3050 standards.

Objective: The user-defined file generated by SPS must be 100% compliant with ANSI X12 3050 standards and future required implementation standards and conventions.

4 SPS System Availability. SPS availability means the number of hours per week the SPS software application and operational database are actually available for use by a properly trained, authorized person. Availability assumes a 168 hour work week (24 hours/day; 7 days/week and is measured by the ratio of total work week time minus application and operational database downtime to total work week time. Application and operational database downtime does not include any downtime caused by or incident to infrastructure failures (hardware, peripheral equipment, LANs, WANs, and power failures).

Threshold: System availability of 92% for IOC and 95% at FOC.

Objective: System availability of 97%.

<u>5</u> <u>Site Reliability (for client-server and stand-alone)</u>. Site reliability is measured by critical failures. A critical failure is defined as any failure caused by the application or relational database management system which results in loss of automated functionality for more than four consecutive hours.

Threshold: A critical failure must not occur more than once per year per site.

Objective: A critical failure must not occur more than once in every two years per site.

<u>6</u> <u>Data Recovery and Restoration</u>. The ability to recover operational data and restore the operational database is critical. Recovery and restoration must be available following an operating system, application, database, or power failure. Catastrophic failures that physically prevent recovery or restoration are excluded.

Threshold: Operational data is recoverable, at the last data save, 98% at IOC and 99.5% at FOC. The operational database is restorable, at the last database save, 98% at IOC and 99.5% at FOC.

Objective: 100% recovery of all operational data and restoration of the operational database each at the last data and database save.

7 Ease of System Administration and Database Administration. The system must provide Government personnel the ability to perform routine system administration tasks such as adding new users, changing passwords, updating clauses, adding forms, etc., on a collateral duty basis. For database administration, SPS must provide database administrators the ability to recover data, identify and fix corrupted tables, monitor database log file, add and delete fields within tables, and adjust the database configuration to optimize performance within a given hardware environment on a collateral duty basis. SPS must provide for contractor support personnel to assist in any functions beyond those performable by on-site Government personnel on a collateral duty basis.

Threshold: Recover data, identify/fix corrupted tables, add/delete fields within tables, 98% at IOC and 99.5% at FOC.

Objective: Recover data, identify/fix corrupted tables, add/delete fields within tables, 100% of the time.

(b) Logistics and Readiness.

1 System Supportability. World-wide interactive user support 24 hours a day, 365 days a year.

Threshold: Interactive user support is provided 24 hours a day, 365 days a year and must report status back to the problem originator within 24 hours, 95% of the time.

Objective: Interactive user support is provided 24 hours a day, 365 days a year and must report status back to the problem originator within 24 hours, 99% of the time.

2 <u>Surge Capability</u>. The initial hardware and operating system software configuration for SPS provides processing power and storage capacity 125% of the measured average daily workload to react promptly to wartime and contingency operating surges without undue time-lags/delays to ensure system availability to users.

Threshold: Provide processing power and storage capacity 125% of the measured average daily workload.

Objective: Provide processing power and storage capacity 125% of the measured average daily workload.

<u>3 Technical Supportability</u>. A software failure that adversely affects the operator's accomplishment of operational performance capability must have a work-around or fix provided within 4 hours of notification.

Threshold: A work-around or fix must be provided within four hours of notification.

Objective: A work-around or fix must be provided within four hours of notification.

e. <u>System Description</u>. System description information is contained in the SPS Acquisition Program Baseline (APB) dated February 26, 1997 (approved April 18, 1997) and Operational Requirements Document (ORD), November 22, 1996 (approved December 5, 1996). SPS will support DoD procurement functions through commercially derived applications software designed to operate in an Open Systems Environment (OSE). SPS operates on component provided

infrastructure. The OSE infrastructure consists of components including processing platforms, associated communications, workstations, and operating systems. The multiple configuration architecture includes MegaCenter processing, minicomputers at the intermediate level, and local area network (LAN) based workstations and stand alone processing at the user level. SPS will support deployment/contingency operations through its capability to operate in a minimum prescribed hardware configuration (per JIEO Report 8300, DoD Minimum Desktop Configuration, November 1994) in which the computer is either a portable laptop or desktop computer. SPS will replace the automated information systems identified in Appendix F and support all DoD procurement organizations. The SPS architecture is described by the SPS Infrastructure/Architecture Version 3.0 document dated April 25, 1997.

(1) Key Features. Objective system characteristic key features are as follows:

(a) SPS architecture:

and SPS uses open-systems architecture to facilitate modular enhancements, growth, and evolution throughout the life cycle of the SPS. Modularity will minimize disruption to customers as the system is upgraded to accommodate changing requirements and evolving technologies. The SPS architecture is based on the approved SPS Standards Profile dated January 3, 1997 (approved March 4, 1997). The SPS Standards Profile summarizes guidelines set forth in the Technical Architecture for Information Management (TAFIM), (Version 2.0, June 30, 1994), TAFIM Volume 2, Technical Reference Manual (TRM) and Standards Profile, the DoD Global Command and Control System Common Operating Environment Baseline (November 28, 1994), the Defense Information Infrastructure (DII) Common Operating Environment (COE) Integration and Run Time Specification (I&RTS) (Version 2.0, October 23, 1995), and the Joint Technical Architecture (JTA) (Version 1.0, August 22, 1996). The SPS PMO and the SPS contractor are in the process of changing the current SPS application to be, as a minimum, DII COE Level 5 compliant. If subsequent standard profile requirements call for higher than DII COE Level 5 compliance the SPS PMO will perform a cost/schedule trade-off analysis to determine if such compliance is practicable.

<u>2</u> The architectural design of the SPS (as shown in Figure 1) can be described as a client/server architecture with distributed databases. Each workstation (lap-top or desktop personal computer) client acquires data from one of the host databases, whether located on the same workstation or a local, regional, or Defense MegaCenter (DMC) server and submits updates to the same host. Sites with local or regional servers will have the option to transmit updates to a Shared Data Warehouse (SDW), hosted at the DMC, which will provide database management services and an environment where standardized, shared, cross-functional data will be available at a DoD-wide level to support the procurement and finance business areas.

 \underline{a} Within the SPS client/server architecture, there are three possible configurations. The first configuration (depicted across the bottom of the figure) is the workstation or end user environment where no local or regional center is supporting the end user.

Both SPS client and server applications are available in this environment. Users may access other SPS servers at regional centers or a DMC through a wide area network (WAN). Users may also access the SDW, hosted at a DMC, through a WAN. In the second configuration (depicted on the left side of the figure), end users are connected to a local SPS server through a LAN. Users in this configuration may also access other SPS servers and the SDW through a WAN. In the third configuration (depicted on the right side of the figure), end users may be co-located with a local or regional server accessing the server through a LAN; or, accessing the server remotely via

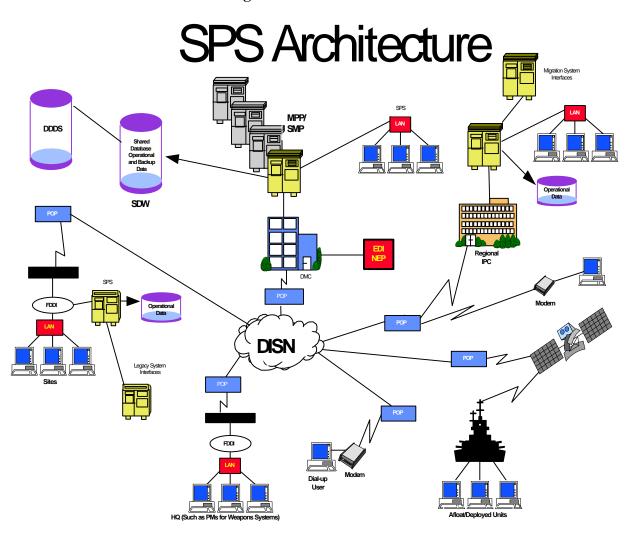


Figure 1. SPS Architecture

modem. In these configurations, the Defense MegaCenter (depicted at the top of the figure) hosts an SPS server and the SDW. The DMC also provides a Contingency of Operations (COOP) function implemented through database replication.

<u>b</u> Each of the configurations described above include varying subsets of the total set of architectural components. The primary architectural components of the SPS architecture include the user workstations, LANs, local and regional servers, DMC site servers, and the DISN. Hardware and support software (e.g., operating systems, network operating systems and distributed systems software) is provided by using agencies and the service components. The SDW is being developed by the Defense Logistics Agency (DLA) System Design Center (DSDC) in support of the finance and procurement functional areas. COOP capabilities will be provided by DISA (DISA Western Hemisphere is responsible for COOP within the technical structure of the Defense Information Infrastructure). Additional details concerning the SPS architecture can be found in the Standard Procurement System Infrastructure/Architecture Document dated April 25, 1997.

 \underline{c} At the workstation level, users will operate workstations (i.e., microcomputers) in a LAN-based environment. Communication capability will permit wide area network (WAN) and/or dial-up connections between MegaCenter and intermediate levels, and will provide electronic access and data interchange between users.

<u>d</u> At the stand alone level, users will operate a laptop, notebook, or desktop computer with a stand alone non-dedicated environment without network connectivity. Software applications and the database will reside on the same platform.

(b) SPS applications software requirements:

1 The SPS application software objective requirements will be provided in four increments. SPS requirements are specified in the Statement of Work matrix of the SPS contract. The functional requirements contained within the Statement of Work matrix were derived from the Standard Procurement System Council validated user requirements promulgated as the SPS Functional Requirements Document (PMP Appendix D) in January 1, 1995. These requirements were derived from the DoD Target Standard Procurement System Functional Description dated 30 September 1994. SPS user requirements have been validated through the staffing and approval of operational performance requirements which have been incorporated into the Acquisition Program Baseline Document. The objective SPS user requirements were validated through the development, coordination and approval of the SPS Operational Requirements Document dated November 22, 1996 (approved December 5, 1996).

2 Increment 1 is the contractor's commercial offering plus EC/EDI capability. Increment 2 includes FORTEZZA. In addition, the Statement of Work matrix identifies the minimum functional requirements to be delivered with Increments 2 through 4, culminating in the full SPS functionality in Increment 4. The SPS PMO and the SPS contractor are in the process of identifying those requirements that the current SPS application meets and will address the remaining requirements to determine the associated cost and delivery schedule.

<u>3</u> Appendix H contains a summary of the functionality, interfaces, and interoperability defined for Increments 1 and 2.

(c) SPS hardware requirements:

- <u>1</u> SPS will be hosted upon Technical Architecture for Information Management (TAFIM) compatible DISA and Service-provided infrastructure, as well as Component supplied end-user workstations and LANs. A description of the SPS architecture is at page 4, SPS Infrastructure/Architecture Document, Version 3.0, April 25, 1997.
- 2 End-user hardware will be compliant with the DISA-provided Common Operating Environment (COE) for Procurement. The DISA Center for Standards (CFS) has established a minimum configuration for end-user hardware in accordance with the Defense Information Systems Agency Joint Interoperability and Engineering Organization Report 8300, November 1994.

(d) SPS support software requirements:

- <u>1</u> SPS support software will consist of the selected operating systems, network operating systems, client-server software, distributed systems software, and other Commercial Off-The-Shelf Software (COTS) as required to operate with DII COE.
- 2 SPS shall be able to populate, read, update, and delete data from a centralized database that will evolve as the DoD standardization and cross-functional corporate information management (CIM) programs mature.

(e) SPS system security requirements:

- <u>1</u> Accountability Individual accountability is required as the SPS will process procurement data in the form of business transactions on behalf of designated procurement officials of the government. The security services supporting accountability include identification, authentication, audit, and non-repudiation.
- 2 Assured Service Due to the critical nature of the procurement mission, SPS must be reliable to provide information to authorized users upon demand. The services supporting assured service include access controls, detection, identification, isolation, audit, contingency planning, and secure recovery.
- 3 Confidentiality Protection of procurement data contained within the SPS domain is required as the unauthorized release of this information would provide unfair advantage to potential contractors during the solicitation and bidding process. Other data must be protected due to bids containing trade secrets, technical methods, and other proprietary data particular to the DoD trading partner base. Security services supporting confidentiality include

access controls and data encryption using the FORTEZZA smart card and its associated infrastructure.

- 4 Data Integrity Data integrity mechanisms must be in place to ensure that critical procurement data is changed only in a specified and authorized manner, and provide for the detection of attempts to corrupt system integrity. Integrity is supported through access controls, identification and authentication, digital signatures, and non-repudiation.
- <u>5</u> Trusted System Environment Application software acquired for SPS must operate in a C2 Trusted System environment.

(f) SPS external interface requirements:

- 1 Electronic Commerce/Electronic Data Interchange. The DoD EC/EDI infrastructure serves as the primary DoD interface to industry for the electronic exchange of procurement transactions. The SPS will originate and receive common User Defined Files (UDFs) based on Government approved EDI transaction sets/implementation conventions.
- <u>2</u> Defense Finance and Accounting Service (DFAS). The DFAS serves as the payment office for DoD contractors. Procurement interfaces with DFAS include information related to invoices, payment and remittance advice, purchase order information, shipment information, and functional acknowledgments. Both transactional and shared database interfaces are required to support migration and legacy systems.
- 3 Logistics. Logistics serves as a high-volume generator of requirements for procurement, at all levels including wholesale, retail, and consumer. These requirements can be for immediate use by end-users or for intermediate storage. Procurement interfaces with Logistics include information related to reservations, confirmations, bookings, status, requisitions, invoices, request for quotes and responses, specifications and technical information, purchase orders and acknowledgments, shipment notices and information, receiving advice and acceptance, test results, product transfers, and warehouse shipping orders. Both transactional and shared database interfaces are required to support migration and legacy systems.
- 4 Commercial Contractors. Commercial Contractors doing EC/EDI with the Federal Government are required to register via a centralized registration process. Once registered, Contractors may receive/respond to solicitations and requests for quotes, provide proposals, and respond with follow-up information associated with the contracting process. Contractors receive purchase orders, changes to purchase orders, contracts, and contract modifications. Contractor submit provide proof of delivery, invoices and, as required, status reports and technical data to the Government.
- <u>5</u> Distribution Depot Systems. Distribution Depot Systems serve DoD by receipting for the delivery of materiel, acknowledging receipt, issuing/transporting materiel to

requiring activities, and storing materiel as directed. Interfaces with procurement include information related to material receipt, test results, and disposition.

- (2) Interoperability and Integration. The SPS product is required to interoperate with the interfaces of Component legacy and migration systems, other Corporate Information Management (CIM) Standard systems (i.e., logistics and finance), DMC services (i.e., COOP), the SDW and commercial contractors (through EC/EDI). SPS will replicate the standard interfaces used by the following legacy systems:
 - Procurement Automated Data and Document System (PADDS)
 - Standard Automated Contracting System (SACONS)
 - Standard Army Automated Contracting System (SAACONS)
 - Defense Fuel Automated Management System (DFAMS)
 - Defense Integrated Subsistence Management System (DISMS)
 - Automation of Procurement and Accounting Data Entry (APADE)
 - Integrated Technical Item Management Procurement (ITIMP)
 - Air Force Material Command (AFMC)
 - Acquisition Management Information System (AMIS)
 - Base Contracting Automation System (BCAS)
 - Base Operating Supply System (BOSS)
 - Standard Procurement System (SPS)/DLA Pre-Award Contracting System (DPACS)
 - SPS/Mechanization of Contract Administration Services (MOCAS)

Interfaces to other legacy systems may be required. Testing of interfaces will be addressed as interfaces are planned for and become available.

- (a) The DPCSC staff will provide management oversight and necessary checks and balances to ensure the integration and interoperability of the SPS product. Because the migration of legacy systems to the SPS requires careful handling of the interfaces, the DPCSC staff (which includes support personnel from DISA D6, Engineering and Interoperability) has developed a Migration Strategies Version 3.0 (February 12, 1997). The plan defines a migration strategy and addresses the components of the SPS architecture: The regional level (including DMC services and access to the SDW), the workstation level, and the stand-alone level. Integration support will be provided by DISA, DSDC, and the SPS contractor.
- (b) The DPCSC staff has also developed a four phase process for Interface Control Document (ICD) construction which is described in the Interface Management Plan and will support the execution of the Migration Strategy. This four phase process includes the definition of as is functional interface requirements and interface methods in phase 1; the definition of as is technical interface specifications and identification of DII requirements in phase 2; development decisions in phase 3; and testing and deployment ready interfaces in phase 4. The DPCSC staff will be responsible for reviewing, validating, recommending, and approving all

documents and data relating to the development of interfaces with those systems that are external to SPS. A combination DPCSC, DISA, DSDC, ICWG, and SPS contractor resources will be used to define and develop Interface Control Documents, Memoranda of Agreement, and/or Memoranda of Understanding to ensure compliance with specified standards, procedures, and rules. The execution of this process will result in ICDs for each system. Interface data has already been collected for a number of legacy systems. The following table depicts the SPS deployment, the legacy/migration systems to be displaced, and the status of interface definition.

Table 1. SPS Interface Definition By Interface

Notional Increment	Systems Replaced	Interface Definition
1	Manual, Semi- automated	EC/EDI as defined by ANSI 3050
2	APADE, SACONS, SAACONS, BCAS, BOSS	ICD construction underway
3	BCAS, BOSS, DISMS, DFAMS, PADDS, ITIMIP, AFMC SUITE, DPACS, SAACONS	ICD construction during FY98
4	AFMC Suite, ITIMP, PADDS, SAACONS, MOCAS	ICD construction during FY98

Critical Technical Parameters (CTPs). The CTPs are listed in Table 2. All CTPs will be addressed in light of the functionality present in Increments 1 and 2; however, they may not be fully met until Increment 4. The CTP that addresses interoperability with Component systems will not apply to Increments 1 or 2 because interoperability with Component systems will not be present in those increments. (Appendix H illustrates the relationship between the functionality present in an Increment to the CTPs.) The CTPs will be reevaluated in subsequent increments to determine whether they are fully, partially, or unmet in view of the functionality presented in these later increments. The source for each CTP is listed in parentheses.

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Table 2. Critical Technical Parameters Matrix

Critical Technical Parameters (source)	Total events	Technical objective and threshold for each test event	Location	Schedule	Decision supported	Demonstrated value
• Operational data (ORD, para. 4.a.(1)(a))	FCD P3 DEM/VAL IOT&E DT FOTE	Threshold: Accurate 98% of the time at IOC. Objective: Accurate 100% of the time.	FCD LAB TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	2QFY96 1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	Not Met
Interoperability (Not tested in Increment 1 or 2) • Interoperable with non-procurement legacy systems. (ORD, para. 4.a.(9))	DT FOTE	Threshold: 98% at IOC. Objective: 100% interoperable through the Shared Data Warehouse.	DT SITE(S) FOTE SITE(S)	3QFY98 3QFY99 1QFY98 1QFY99	MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (C) INC 3 MS II/III (D) INC 4	Not Tested INC 1
(Data Standardization) Accepts and processes standard data that conforms to the definitions in the DoD Standard Data Dictionary and legacy system data that has been converted to operate with SPS. (ORD, para. 4.a. (10))	DT FOTE	Threshold: 90% of the standard data and correctly converted data is accepted and processed. Objective: 100% of the standard data and correctly converted data is accepted and processed.	DT SITE(S) FOTE SITE(S)	3QFY98 3QFY99 1QFY98 1QFY99	MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (C) INC 3 MS II/III (D) INC 4	Not Tested INC 1

Critical Technical Parameters (source)	Total events	Technical objective and threshold for each test event	Location	Schedule	Decision supported	Demonstrated value
Security Unauthorized access and intrusion. (ORD, para. 4.c) Acceptance according to authorization and privileges (ORD, para. 4.c)	FCD P3 DEM/VAL IOT&E DT FOTE FCD P3 DEM/VAL IOT&E DT	Threshold: 98% rejection at IOC. Objective: 100% rejection	FCD LAB TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S) FCD LAB TEST SITES IOT&E SITES DT SITE(S)	2QFY96 1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99 2QFY96 1QFY97 2QFY97	MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3	* Met Objective * Met Objective
	FOTE		FOTE SITE(S)	3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	

Critical Technical Parameters (source)	Total events	Technical objective and threshold for each test event	Location	Schedule	Decision supported	Demonstrated value
Security (continued) • Rejection of incorrect passwords/IDs (ORD, para. 4.c)	FCD P3 DEM/VAL IOT&E DT FOTE	100% rejection	FCD LAB TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	2QFY96 1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	* Met Objective
• Rejection of incorrect functional attempts (ORD, para. 4.c.)	DEM/VAL IOT&E DT FOTE	100% rejection	TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	Met Objective
• Log-off after selected time-out duration. (ORD, para. 4.c.)	FCD P3 DEM/VAL IOT&E DT FOTE	100% log-off	FCD LAB TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	2QFY96 1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	* Not INC I Item
Protection (rejection of unautorized attempts) (ORD, para. 4.c.)	FCD P3 DEM/VAL IOT&E DT FOTE	100% rejection	FCD LAB TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	2QFY96 1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	* Met Objective

Critical Technical Parameters (source)	Total events	Technical objective and threshold for each test event	Location	Schedule	Decision supported	Demonstrated value
Timeliness • Mandatory contract reporting. (ORD, para 4.a.(7)(a))	DEM/VAL IOT&E DT FOTE	Threshold: Information must meet mandatory reporting time frames outlined in the FAR/DFARS. Objective: Information must be available on demand.	TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	Met Objective
• Ad hoc management reports. (ORD, para 4.a(7)(b))	DEM/VAL IOT&E DT FOTE	Information must be available on demand.	TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	Not INC 1 Item
On-line capability to receive, store, and retain historical information. (ORD, para 4.a.(8))	FCD P3 DEM/VAL IOT&E DT FOTE	Information must be available on-line.	FCD LAB TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	2QFY96 1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	* Not Met
• Visual and/or aural indication to the client user that the task or function has started from the time the user completes the initiating command. (ORD, para 4.a.(2)(c)) • Application ready to receive a new command after exiting the prior command. (ORD, para 4.a.(2)(c))	DEM/VAL IOT&E DT FOTE DEM/VAL IOT&E DT FOTE	Within 1 second. Threshold: Within 5 seconds. Objective: Within 1 second.	TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S) TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99 1QFY97 2QFY97/3QFY98 3QFY99/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	Met Objective Met Threshold

Critical Technical Parameters (source)	Total events	Technical objective and threshold for each test event	Location	Schedule	Decision supported	Demonstrated value
Response Time (continued) • Allows subsequent user commands after task or function completion. (ORD, para 4.a.(2) (c))	DEM/VAL IOT&E DT FOTE	Within 5 seconds.	TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	Met Objective
Processing Time • Time for task or function to be competed, operational database to be updated, and the user presented with a visual or aural indication. (ORD, para 4.a.(2)(c))	DEM/VAL IOT&E DT FOTE	Threshold: Simple task: Within 1 minute; Moderately complex task: Within 1.5 minutes Complex task, print job, or database save: Within 5 minutes. Objective: Simple task: Within 30 seconds; Moderately complex task: Within 1 minute Complex task; print job, or database save: Within 3 minutes.	TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	Met Threshold
Data Relevance • Operational data. (ORD para. 4.a.(1)(a))	DEM/VAL IOT&E DT FOTE	Threshold: Relevant 98% of the time at IOC. Objective: Relevant 100% of the time.	TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	Met on HP server; Not Met on NT server

Critical Technical Parameters (source)	Total events	Technical objective and threshold for each test event	Location	Schedule	Decision supported	Demonstrated value
Data Currency Operational data. (ORD para. 4.a.(1)(a))	DEM/VAL IOT&E DT FOTE	Threshold: Current 98% of the time at IOC. Objective: Current 100% of the time.	TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	Met on NT server; Not Met on HP server
Data Edits Identify errors and reject incorrectly entered data for all operational data. (ORD, para. 4.a.(1)(b))	DEM/VAL IOT&E DT FOTE	Threshold: 98% of the time at IOC. Objective: 100% of the time.	TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	Met Threshold on HP , Not Met on NT server
Data Entry • Single data entry. (ORD, para. 4.a.(1)(c))	DEM/VAL IOT&E DT FOTE	Threshold: 98% of the time at IOC. Objective: 100% of the time.	TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	Met Threshold on NT server; Not Met on HP server

Critical Technical Parameters (source)	Total events	Technical objective and threshold for each test event	Location	Schedule	Decision supported	Demonstrated value
Data Integrity • "Read only" data. (ORD, para. 4.a.(1)(d))	DEM/VAL IOT&E DT FOTE	Threshold: Data will not be altered by a routine user manipulation 98% of the time at IOC. Objective: Data will not be altered by a routine user manipulation 100% of the time.	TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	Met Threshold on HP server; Not Met on NT server
• Changeable data. (ORD, para. 4.a.(1)(d))	DEM/VAL IOT&E DT FOTE	Threshold: Data reflects the most recent update by an authorized user 98% of the time at IOC. Objective: Data reflects the most recent update by an authorized user 100% of the time.	TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	Met Threshold
• User defined file generated by SPS (ORD para. 4.a (5))	DEM/VAL IOT&E DT FOTE	Threshold: 100% compliant with ANSI X12 3050 standards Objective: 100% compliant with ANSI X12 3050 standards and future required implementation standards and conventions.	TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	Met Threshold

Critical Technical Parameters (source)	Total events	Technical objective and threshold for each test event	Location	Schedule	Decision supported	Demonstrated value
Recovery and Restoration • Operational data is recoverable and restorable. (ORD para. 4.a(1)(e))	DEM/VAL IOT&E DT FOTE	Threshold: Recoverable at the last data save and restorable at the last database save 98% at IOC and 99.5% at FOC. Objective: 100% recovery of all operational data and restoration of the database each at the last data save.	TEST SITES IOT&E SITES DT SITE(S) FOTE SITE(S)	1QFY97 2QFY97 2QFY97/3QFY98 3QFY99 3QFY97/1QFY98 1QFY99	MS II/III (A) INC 1 MS II/III (A) INC 1 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4 MS II/III (B) INC 2/ MS II/III (C) INC 3 MS II/III (D) INC 4	Not Fully Tested
System Availability • System Availability. (ORD, para. 4.a(3))	DT FOTE	Threshold: System Availability of 92% for IOC and 95% at FOC. Objective: System Availability of 97%.	DT SITE(S) FOTE SITE(S)	3QFY98/3QFY99 1QFY98/QFY99	MS II/III (C) INC 3/MS II/III (D) INC 4 MS II/III (C) INC 3/MS II/III (D) INC 4	Not measured for MSII/IIIB
Site Reliability • Site Reliability for client-server and stand-alone. (ORD, para. 4.a.(4))	DT FOTE	Threshold: Critical failure must not occur more than once per year per site. Objective: Critical failure must not occur more than once every 2 years per site.	DT SITE(S) FOTE SITE(S)	3QFY98/3QFY99 1QFY98/QFY99	MS II/III (C) INC 3/MS II/III (D) INC 4 MS II/III (C) INC 3/MS II/III (D) INC 4	Not measured for MSII/IIIB

NOTE: FCD P3= Functional Capabilities Demonstration Phase 3 DEM/VAL=Demonstration/Validation IOT&E=Initial Operational Test and Evaluation DT=Developmental Test FOTE=Follow-*Reported as part of Demonstration/Validation Results

FOTE=Follow-On Test and Evaluation INC=Increment MS= Milestone

PART II INTEGRATED TEST PROGRAM SUMMARY

a. <u>Integrated Test Program Schedule</u>.

- (1) This section identifies overall responsibilities for managing, conducting and coordinating SPS test activities. The integrated schedule reflects the key decision points, and the Developmental Test and Evaluation (DT&E) and Operational Test and Evaluation (OT&E) events required to support those decisions.
- (a) Test Program Directives. The SPS test program must meet the regulatory guidance of stated references. The SPS test program may exceed any standard, at the Program Manager's (PM) direction, to meet PM concerns for adequate and timely testing. The Test and Evaluation Master Plan (TEMP) will guide the testing framework for SPS.
- (b) Program Acquisition Events. Offerors provided existing commercial software for the Functional Capabilities Demonstration (FCD) Phase I and demonstrated their ability to execute a minimum of stated RFP required functionality. Offerors who passed FCD Phase I were invited to prepare proposals and participate in FCD Phase II, which consisted of a series of procurement actions with known results that offerors were asked to perform via their offered product. Proposals were evaluated by the Source Selection Evaluation Board (SSEB). During proposal evaluation, further functional testing was performed via FCD Phase III. The SSEB prepared a formal report to the Source Selection Advisory Council (SSAC). The SSAC recommended offerors to the Source Selection Authority (SSA) for contract awards. Based on SSA decisions, two contracts were awarded for a base period. A user Demonstration/ Validation (DEM/VAL) of purchased goods and services was performed on the products from the resultant contracts. DEM/VAL results were provided to the SSEB in addition to updated proposals from the contractors. The SSEB used this data to make a final report/recommendation to the SSAC. The SSAC evaluated the SSEB report and made recommendations to the SSA. The single contractor to provide the SPS objective system for DoD-wide deployment was announced on April 7, 1997.

(c) SPS software strategy.

<u>1</u> The SPS application software is based on commercially available products, modified as necessary, to meet the full functional automation requirements of the procurement community. No single commercial product satisfied all the required SPS functionality, therefore, a derivative commercial product was required. This derivative product is a result of the integration of an existing commercial product and additional government requirements to provide required functionality.

<u>2</u> The SPS application software objective requirements will be provided in four increments.

<u>3</u> Major Automated Information System Review Council (MAISRC) Milestone II/III (A) (Increment 1) approval was provided May 22, 1997. SPS began deployment to users at non-automated and semi-automated procurement sites. Follow-on increments will provide expanded procurement functionality required for existing procurement automated sites and this functionality will be back fitted via upgrades to previously deployed sites.

(d) Incremental Deployment Strategy. The SPS Program Management Office (PMO) will control the fielding of SPS application software using an incremental deployment strategy. Emergency fixes to the baseline will be properly tested before operational test. All other changes, including (1) maintenance enhancements to the baseline, (2) technology insertions, (3) new application functionality, (4) existing applications which may be targeted to convert to the SPS platform, and (5) changes to SPS required by legislative or regulatory guidance, will be grouped into increments for configuration management, controlled through the testing process, and released. The table below provides the correlating conventions used in SPS acquisition and program management documents.

Table 3. Acquisition and Testing Incremental Conventions

INCREMENT	CLIN	VERSION	DESCRIPTION
1	0080	3.0	Commercial product
1	0080*	3.1	Enhanced commercial
1	0080*+	3.1.4	Enhanced commercial with EDI capability
2	0085	3.5.3	Additional functionality and Fortezza capability
3	1080	4.0.0	Additional functionality
4	2080	5.0.0	Additional functionality

Note: CLIN 0080 used at FCD; 0080* assessed during DEM/VAL; 0080*+ at OT of Increment 1

(e) Testing Strategy - MAISRC MS II/III.

<u>1</u> The SPS PMO intends to conduct DoD required testing on all increments. A Working-level Integrated Product Team (WIPT) composed of members of the T&E and user communities meets periodically to facilitate the SPS T&E process. The purpose of the WIPT is to facilitate communications, coordination, and understanding regarding SPS T&E, resolve issues at the lowest possible level, and elevate issues requiring the attention of higher-level decision makers.

2 Increment 1 underwent a DT&E and an IOT&E. The SPS Statement of Work contained criteria for acquisition decisions and information which were used to support testing.

 $\underline{a}\,$ DT&E for Increment 1 consisted of portions of the FCD and a DEM/VAL.

<u>b</u> The FCD for Increment 1 was primarily used as part of the proposal evaluation and source selection.

- <u>c</u> DEM/VAL further technically and functionally validated the software functions and applications provided from the awarded contracts. A final Test and Evaluation Report (TER) was provided on March 12, 1997.
- $\underline{3}$ Developmental Test for all increments for SPS will accommodate the following:
 - a A DTRR will be conducted prior to the start of the DT&E.
- \underline{b} Information Technology (IT) standards conformance will be evaluated as part of DT&E for each increment.
 - <u>c</u> A TER will be provided.
- 4 An Operational Test Readiness Review (OTRR) will determine the readiness of any increment to proceed to IOT&E.
- <u>a</u> Software metrics and exit criteria for proceeding to OT&E will be used in support of the OTRR. Fault profile, cost, schedule, and requirements traceability metrics will be presented. Data will be collected to support the software metrics effort. This data will be used for risk assessment and analysis. Increment 1 functionality that is ready at OTRR for IOT&E will become the baseline.
- <u>b</u> The entrance criteria for any increment undergoing operational test (OT) will be: no Priority I or II problems exist; Priority III problems must be documented with appropriate analysis completed; system functionality to be operationally tested must be available and must have been developmentally tested.
- <u>c</u> The PMO will identify all the unmet CTPs and open deficiencies that have been noted during DT&E. The SPS PMO will certify to the Acquisition Executive that software requirements and design are stable, that software and interface testing of sufficient depth and breadth has been performed, and that required functionality has been successfully demonstrated at the system level. Impact analysis will be provided on the shortfalls. The OTRR will also ensure that all required certifications are made prior to proceeding to OT.
- <u>d</u> Operational test results will be used to support an initial MAISRC Milestone II/III(A) decision. All future increments will be subjected to a DT&E and Follow-on Operational Test and Evaluation (FOTE).

<u>5</u> Post Testing Strategy. Following successful operational testing of any increment, the SPS tested system may be left in an operational mode at the operational test site(s).

6 Risk management associated with the SPS will be conducted within the framework established in the SPS Risk Management Plan, dated February 8, 1997. The risk management process, as defined within the plan, includes risk assessment and risk mitigation. In support of risk assessment, the plan identifies the major SPS risk areas and associated risk events. For each risk event, the severity of the risk and the potential impact to the program have been assigned a qualitative rating (high, medium, low). A probability for each risk has also been assigned. Risk mitigation strategies associated with each risk event have been defined. The SPS Risk Management Plan will be updated as the program progresses.

7 Integrated Test Program Schedule. The integrated program schedule is provided in Figure 2. This schedule shows projected dates for T&E activities, and the projected dates for major milestones for the program. The schedule is current as of the date of this document.

Figure 2. Integrated Test Program Schedule (Calendar Year)

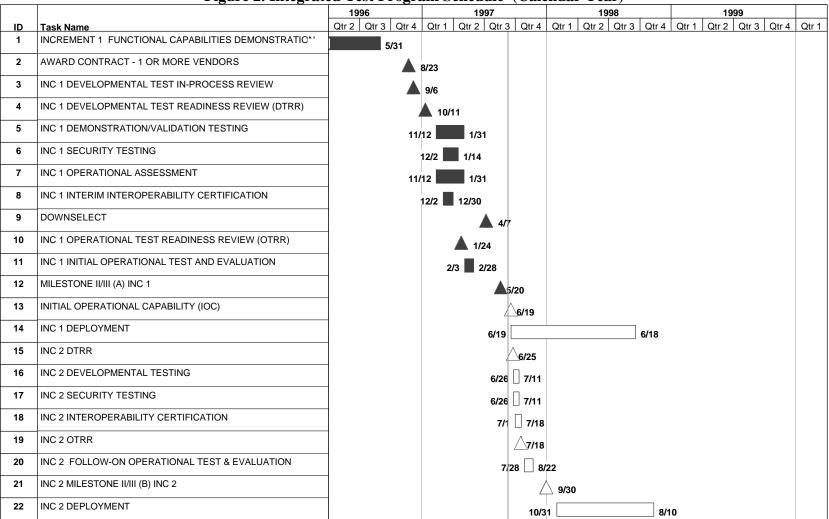
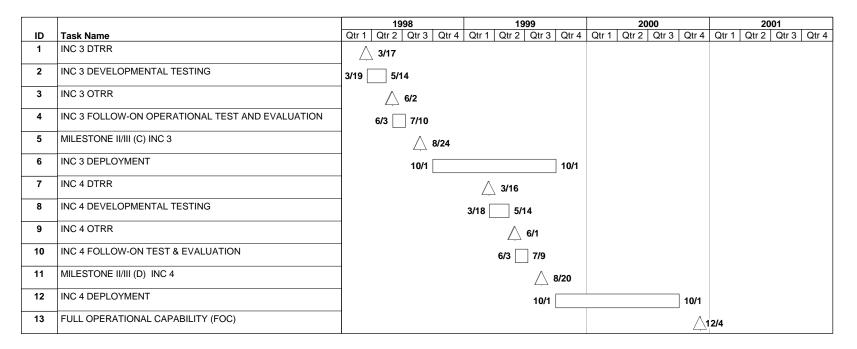


Figure 2. Integrated Test Program Schedule



b. **Management.**

- (1) The test and evaluation responsibilities of all participating organizations are listed below:
- (a) Program Management. The Defense Procurement Corporate Information Management Systems Center (DPCSC), Defense Logistics Agency (DLA) is assigned the role as the Program Management Office (PMO) for the SPS. DPCSC is responsible for managing the life-cycle management and acquisition of the SPS.
- (b) Developmental Test Activity (DTA). The overall responsibility for DT&E rests with the DPCSC. However, the DPCSC has obtained the support of the DISA Joint Interoperability Test Command (JITC), Washington Operations Office. JITC is responsible for the planning and conduct of DT&E. The role of JITC is to provide a comprehensive and complete DT&E of the SPS. JITC will produce and deliver a Test and Evaluation Report to communicate the findings obtained from DT&E. This report will be used to assess the readiness to proceed to an operational test. Additional developmental test support will be provided by the DISA Engineering and Interoperability Directorate (D6). DISA D63 (Combat Support Division) is responsible for integrating the SPS product increments into the Defense Information Infrastructure (DII) and for evaluating the degree of product compliance with the DII.
- (c) Operational Test Activity (OTA). The DISA JITC Operational Test and Evaluation Department, Fort Huachuca, Arizona, is the OTA for SPS. JITC's role will be to provide an independent, comprehensive, and complete operational test and evaluation of SPS. JITC is responsible for the planning and conduct of OT&E. Once testing is complete, JITC will produce and deliver an Independent Test and Evaluation Report to report the data and information obtained from operational testing and describe the conditions that actually prevailed during test conduct and data collection. This report will also be used once SPS is ready for a MAISRC Milestone II/III review.
- (d) Developmental and Operational Test Users. Military Department and Defense Agency functional users, and when specifically requested by the user, testers, and infrastructure representatives, will participate in the planning for and conduct of both DT&E and OT&E.
- 1 Procurement personnel at test sites will receive SPS training in preparation for their participation in testing. They will function as users and system managers during SPS testing. Additionally, system administration personnel should also receive training on SPS to provide support during the conduct of testing since they will be the primary maintainers during the operational test.
- <u>2</u> Military Departments and Defense Agencies will assist in identifying and providing rationale associated with testing requirements. These groups will be identified and supported through the Test and Evaluation Working Group (TEWG). They will be active participants in the development of test parameters, refining the critical technical parameters, measures of effectiveness and suitability, and documentation needed for testing.

- (e) Logistics. The DPCSC Integration Team is responsible for management and oversight of SPS related fielding support. DPCSC receives support for logistics planning from DISA. The DISA Directorate for Procurement and Logistics (D4) is responsible for support to SPS logistics planning and related documentation. DPCSC, with support from DISA D4 and a DPCSC Systems Engineering and Technical Assistance contractor, will develop the Integrated Logistics Support Plan.
- (f) Interoperability Certifier. DISA JITC (JTDA) has been delegated the role of interoperability certifier by the Joint Chiefs of Staff and serves as the DoD executive agent for testing and certification of C4I systems and equipment for Compatibility, Interoperability, and Integration (CII). JITC is responsible for certifying systems that meet CII requirements to the Director, Operational Test and Evaluation. The SPS Test Director has been appointed by JITC to serve as the interoperability certifier for the SPS increment that will undergo IOT&E.
- (g) Designated Approval Authority (DAA) Security Accreditation. The Principal Deputy Director, Defense Logistics Agency (DLA) will serve in the role as the DAA for the SPS. DAA representatives are responsible for reviewing SPS security related documentation, test results, and products in preparation for formal security accreditation.
- (h) Security Test and Evaluation (ST&E). An independent ST&E will be performed by the National Security Agency (NSA) Network Security Group. NSA is responsible for the technical evaluation of security features, controls, and other safeguards to measure the extent to which the SPS meets specified security requirements. The NSA team will capture the results of this evaluation in a formal report to assist the DISA Center for Information Systems Security (CISS) in the certification of system security controls. This report will serve as input to the formal SPS security accreditation process.
- (i) Information Technology (IT) Standards Certifier. The DISA Center for Standards (CFS) will certify the SPS IT standards profile. The DISA CFS is responsible for executing the duties of the Executive Agent for DoD IT standards. The CFS role regarding SPS is to specify applicable standards and to certify the IT standards profile.
- (j) Training Coordination. The SPS PMO is responsible for training schedule coordination of the user community in accordance with the terms of the SPS contract.
- <u>1</u> The span of the training will cover the following major groups of individuals: managers, technical support staff, and users (e.g., contracting personnel, purchasing personnel, and support staff).
- <u>2</u> Training for initial SPS application software usage, Demonstration/Validation testing, and site administration was provided by the contractor.
- <u>3</u> Initially, the contractor providing the SPS application software trained the testers and key SPS users at each Demonstration/Validation site, using one or more of the following training methods: hands on, lecture, workshop, Computer Based Training, orientation

briefing, and/or training courses that train government employees to provide training to their workforce (train-the-trainer).

- $\underline{4}$ The contractor trainers will provide training to users that will participate in OT&E.
- <u>5</u> The SPS PMO will oversee the implementation of the SPS deployment training and program. Following full deployment, the SPS PMO will obtain the necessary materials from the SPS contractor and transfer training responsibilities to designated Component training activities and/or Service Schools as directed by the Components, as stated in the draft SPS Training Plan.
- (k) A Systems Engineering Technical Assistance (SETA) contractor will support the development of the interface to the Defense MegaCenter (DMC) Shared Data Warehouse (SDW). The SETA contractor will, in coordination with the DMC Central Design Activity (CDA), assist the SPS contractor in building interfaces to the SDW and supporting data conversions and the migration of data.
- (l) Central Design Activities. The Interface Management Team is developing Memorandums of Understanding (MOUs) with each component CDA. The CDAs will be involved with the SPS contractor's development and testing of the replicated interfaces.

PART III DEVELOPMENTAL TEST AND EVALUATION OUTLINE

- **a. Developmental Test and Evaluation (DT&E) Overview.** DT&E of the SPS product is being conducted in increments corresponding to the two major contract base year software deliveries (Increments 1 and 2) and the contract option year 1 and 2 deliveries (Increments 3 and 4).
- (1) The SPS PMO will use the Joint Interoperability Test Command Washington Operations Office to conduct DT&E. DT&E for the initial Increment 1 included a portion of the Functional Capabilities Demonstration (FCD) conducted as part of the source selection process and a Demonstration/Validation (DEM/VAL) phase conducted at 16 user sites. DEM/VAL provided data to support the source selection process and DT&E. In addition, security testing was conducted on the Increment 1 product. Increments 2-4 DT&E will not require FCDs, but may include testing at user sites.
- (a) Assessment of software maturity. The maturity of the SPS software product will be assessed throughout the cycles of software development associated with Increments 2 through 4. Monthly contractor status reports detailing performance and completed activities pertaining to SPS implementation and software development activities will be reviewed to gauge readiness to proceed to government testing. These reports will contain a listing of outstanding discrepancy reports, configuration management changes, explanations for differences between required performance and achieved completion dates, and the identification of problem areas and recommended solutions with after-action status. The SPS contractor will also measure requirements traceability and breadth of testing as well as maintain a fault profile associated with discrepancy reports. These reports and software related metrics will provide insight into the maturity of the SPS software and its readiness for government test and evaluation.
- (b) Compliance with open systems. The determination of SPS product compliance with open systems standards will be accomplished with support from DISA D6 (Engineering and Interoperability). The SPS product will be integrated into the DII Common Operating Environment (COE) baseline by the DISA integration contractor at the Operational Support Facility (OSF). The resulting integration and evaluation steps will be used to determine the level of open systems compliance against Appendix B (Compliance Checklists) of the Defense Information Infrastructure (DII) Common Operating Environment (COE) Integration and Runtime Specification (I&RTS) (October 23, 1995).
- (c) Compliance with security standards. The determination of SPS product compliance with security standards will be accomplished by thorough security testing conducted by the National Security Agency (NSA). SPS products will be tested for C2 level compatibility in accordance with the SPS Request for Proposal requirements and security standards (i.e., DoD 5200.28 STD, DoD Trusted Computer System Evaluation Criteria, December 26, 1985). NSA will test requirements for user authentication, confidentiality, non-repudiation, audit, penetration resistance, and FORTEZZA integration, and other required mechanisms.

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- (d) Interoperability certification. Interoperability certification will follow the process defined in JIEO/JITC Circular 9002 (January 23, 1995) for Compatibility, Interoperability and Integration certification.
- (2) Since DT&E is conducted to support milestone decisions, the DT&E strategy was developed to be responsive to established exit criteria. The exit criteria for Milestone II/III were established in the SPS Program Management Plan (PMP), dated January 31, 1995. The following table shows the relationship between the exit criteria and the cumulative DT objectives.

Table 4. Relationship Between MS II/III Exit Criteria and Developmental Test Objectives

MS II/III Exit Criteria	DT Objective
System performance meets user needs	Determine if SPS meets technical and functional requirements (includes CTPs)
	Identify any software problems
	Assess the compatibility of the SPS application
SPS commercial software meets functional needs as demonstrated in test results and operational test certification	Determine if SPS meets technical and functional requirements
operational test certification	Focus on software capability to provide procurement functionality
	Test pre-award and post-award contracting business in a procurement activity (Increment 1 only)
	Determine readiness for operational testing
Deployment and transition plans are in place	No related DT objective
Deployment funds are available	No related DT objective

(3) The Functional Capabilities Demonstration was completed on May 31, 1996. Formal DT&E began concurrently with FCD Phase III and was used to collect data, refine areas of data collection, and provide early identification of potential problems related to the breadth of training and testing. An initial sample of data addressing critical technical parameters was collected, with the exception of security (passwords and the location of the audit log were not provided by the contractors). Complete operator training courses were not presented by the contractors, so determinations on breadth of training could not be conducted. Contractor demonstrations of the SPS offerings during FCD Phase II and DT&E team hands-on testing of them in FCD Phase III provided insight into software capability. These experiences aided in the refinement of areas of

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data collection and provided an indication of the breadth of testing possible for the Demonstration/Validation based on each contractors' SPS capabilities.

- (4) <u>Developmental Testing for Increment 1</u>. DT&E included three mutually supporting activities: developmental testing, security testing, and DEM/VAL at user sites. These activities provided information to support the source selection process down-select to a single SPS contractor and to determine the readiness of the product for operational testing. The DT&E test period began in November 1996 after installation of the winning contractors' products at the DISA Operational Support Facility (OSF) in Sterling, Virginia. Installation at an NSA test facility and at 16 procurement functional user sites was also accomplished in October and November 1996. Installation and operation of SPS at 16 user sites provided data concerning the software compatibility with the defined infrastructure. DEM/VAL was driven by user assessment based on historical procurement data plus experimentation. Procurement functional testing was accomplished using scenarios tailored to address the procurement functions at each site. Security testing conducted by the National Security Agency to determine the SPS products' compatibility with requirements for C2 level security was used to obtain an Interim Authority to Operate. Concurrent developmental testing at the OSF consisted of an evaluation of CTPs, integration into the DISA defined DII infrastructure, testing within the infrastructure, and Electronic Commerce/Electronic Data Interchange (EC/EDI). JITC used the DT&E period to collect performance data on technical requirements, functional requirements satisfaction, training, installation, usability, and other supportability capabilities. Testers and users also identified problems and deficiencies in the software to JITC, who passed them to the PMO for monitoring and resolution. When it was observed that a contractor's software did not perform correctly, a System Problem Report (SPR) was submitted to the JITC Test Manager. An SPR scoring conference body with membership consisting of representatives from the user community, PMO, DT, OT, and DLA test oversight met to score the SPRs. SPRs were scored for priority using the MIL-STD-498 definition and for chargeability (to the SPS software or some other area such as hardware or user error). The scored SPRs reflecting Priority 1 or 2 problems attributed to the software were passed to the SPS PMO for resolution by the appropriate contractor. When the contractor corrected a problem the fix to the SPR(s) was installed first at the OSF, reviewed by the test team in conjunction with the acceptance team, then released to the sites.
- (5) Acceptance Testing and Initial Developmental Testing for Increment 2. The DT&E test period for Increment 2 began with installation of the contractors' products at the DISA Operational Support Facility in Sterling, VA in December 1996. Security testing is being conducted to determine the adequacy of the contractor's FORTEZZA integration and compatibility with C2 level security requirements. Concurrent developmental testing at the OSF consists of an evaluation of CTPs, validation of increased functionality, integration into the DISA defined DII infrastructure, and testing within the infrastructure. JITC used the DT&E period to collect performance data on technical and functional requirements satisfaction. Testers also identified problems and deficiencies in the software to JITC, who passed them to the PMO for monitoring and resolution. Results obtained from Increment 2 DT&E during the source selection evaluation period were provided to support a down-select to a single SPS contractor.

- (a) Software Deficiencies. A System Problem Report (SPR) was written if the contractor's software did not perform as contracted. The JITC Test Manager passed the SPR to the SPS PMO for resolution by the contractor. The SPS PMO initiated the appropriate contractual action to obtain corrective action. When the contractor corrected a problem, the fix was installed at the OSF, tested and then accepted if satisfactory.
- (b) Configuration Description. The SPS Increment 2 included Fortezza card integration and the functionality contained in the contractor's proposal as specified in the contract. Increment 2 test article configurations are listed in Appendix G.

b. Future Developmental Test and Evaluation.

- (1) <u>Remaining Developmental Testing for Increment 2</u>.
- (a) Software Deficiencies. If during the Increment 2 DT&E period, it is determined that contractor software does not perform as contracted for, a System Problem Report will be written. The JITC Test Manager will pass the SPR to the SPS PMO for resolution by the contractor. The SPS PMO will initiate the appropriate contractual action to obtain corrective action. When the contractor corrects a problem, the fix will be installed at the OSF, tested and then accepted if satisfactory.
- (b) Configuration Description. The SPS Increment 2 includes Fortezza card integration and the functionality contained in the contractor's proposal as specified in the contract. Increment 2 test article configurations are listed in Appendix G.
 - (c) Increment 2 Objectives.
 - 1 DT&E will be conducted to:
 - Determine if SPS meets technical/functional requirements
 - Identify any software problems
 - Assess the compatibility of the SPS application
 - Assess the integration of the Fortezza capability
- $\underline{2}$ DT&E will determine the readiness of the software for operational testing based upon evaluation against critical technical parameters.
- <u>3</u> The relationship of Increment 2 DT&E objectives to exit criteria is demonstrated in the following table.

Table 5. Relationship Between MS II/III(B) DT&E Objectives and Exit Criteria

DT Objectives	MS II/III(B) Exit Criteria
Determine if SPS meets technical and functional requirements	All Contractor proposed functionality that is accepted or conditionally accepted by the government will be tested
Identify any software problems	No outstanding priority 1 or 2 System Problem Reports (based on MIL-STD-498 definitions)
Assess the compatibility of the SPS application	Security testing demonstrates no inhibitors to C2 level compatibility
Assess the integration of the Fortezza capability	None. Assessed by PM, but not tested by the Operational Tester
Determine the readiness of the software for operational testing	Product meets 100% of CTPs applicable to Increment 2

- (d) Events, Scope of Testing, and Basic Scenarios. Specific events, scope of testing, and scenarios will be driven by the functionality delivered in Increment 2. During DT&E, the following major categories will be tested:
 - 1 the SPS application and database capabilities provided at time of delivery;
- <u>2</u> the ability of the SPS application and database to operate within the minimum requirements for at least one of the Government's target architecture environments;
- $\underline{3}$ the ability of the SPS application and database to incorporate or map to DoD standard procurement data elements (if available);
- 4 the ability of the SPS application and database to accurately originate and receive error-free flat files in ASCII text based on Government furnished User Defined Files using ANSI X12 Version 3050 Electronic Data Interchange transaction sets and text messaging using the Fortezza capability and procedures; and
- <u>5</u> the ability of the SPS application and database to interface with site specific legacy and/or migration systems (if available).
- (e) Limitations. There are no test limitations that may significantly affect the evaluator's ability to draw conclusions.
- (2) <u>Acceptance Testing and Developmental Testing for Increments 3 and 4</u>. Subsequent software updates will expand upon the initial functionality and system interfaces. At a minimum, all

subsequent SPS increments will be developmentally tested at the OSF, and optionally at an appropriate Central Design Activity for interfaces. The DT&E test period for Increments 3 and 4 begins with installation of the contractors' product at the DISA Operational Support Facility in Sterling, Virginia and the execution of a government approved Acceptance Test Procedure (ATP). Installation of the software product will be considered complete, and will be accepted by the government, when the product meets performance testing criteria in accordance with the government approved ATP. Developmental testing at the OSF will consist of an evaluation of CTPs, evaluation of compatibility with C2 level security requirements, integration into the DISA defined DII infrastructure, and testing within the infrastructure. JITC will use the DT&E period to collect performance data on technical requirements, functional requirements satisfaction, and installation.

- (a) Software Deficiencies. If during the Increment 3 and 4 DT&E period, it is determined that contractor software does not perform as contracted for, or correctly, a System Problem Report will be written. The JITC Test Manager will pass the SPR to the SPS PMO for resolution by the contractor. The SPS PMO will initiate the appropriate contractual action to obtain corrective action. When the contractor corrects a problem, the fix will be installed at the OSF, tested and then accepted if satisfactory.
- (b) Configuration Description. The SPS Increments 3 and 4 will consist of the functionality contained in the contractor's proposal as specified in the contract. Increment 3 and 4 test article configurations will be defined after negotiations between the Government and SPS contractor concerning the contents of each increment.
 - (c) Increments 3 and 4 Objectives.

1 DT&E will be conducted to:

- Determine if SPS meets technical/functional requirements
- Identify any software problems
- Assess the compatibility of the SPS application
- Assess the interoperability of the SPS application
- $\underline{2}$ DT&E will determine the readiness of the software for operational testing based upon evaluation against critical technical parameters.
- 3 The relationship of Increment 3 and 4 DT&E objectives to exit criteria is demonstrated in the following table.

Table 6. Relationship of MS II/III(C) and (D) DT&E Objectives to Exit Criteria

DT Objectives	MS II/III(C) and (D) Exit Criteria
Determine if SPS meets technical and functional requirements (Increment 3)	All Contractor proposed functionality that is accepted or conditionally accepted by the government will be tested
Identify any software problems	No outstanding priority 1 or 2 System Problem Reports (based on MIL-STD-498 definitions)
Assess the compatibility of the SPS application	Security testing demonstrates no inhibitors to C2 level compatibility
Assess the interoperability	Interfaces to targeted legacy and migration systems are successfully demonstrated
Determine the readiness of the software for operational testing	Product meets 100% of CTPs applicable to Increment 3
Determine if SPS meets technical and functional requirements (Increment 4)	All Contractor proposed functionality that is accepted or conditionally accepted by the government will be tested
Identify any software problems	No outstanding priority 1 or 2 System Problem Reports (based on MIL-STD-498 definitions)
Assess the compatibility of the SPS application	Security testing demonstrates no inhibitors to C2 level compatibility
Assess the interoperability	Interfaces to targeted legacy and migration systems, DMC services and the SDW are successfully demonstrated
Determine the readiness of the software for operational testing	Product meets 100% of CTPs applicable to Increment 4

(d) Events, Scope of Testing, and Basic Scenarios. Specific events, scope of testing, and scenarios will be driven by the functionality delivered in Increments 3 and 4. During DT&E, the following major categories will be tested:

 $\underline{\mathbf{1}}\;$ the SPS application and database capabilities existing at the time of delivery;

2 the ability of the SPS application and database to operate within the minimum requirements for each of the Government's target architecture environments;

 $\underline{3}$ the ability of the SPS application and database to incorporate or map to DOD standard data elements;

- $\underline{4}$ the ability of the SPS application and database to interface with site specific legacy and/or migration systems; and
- $\underline{\mathbf{5}}\,$ the ability of the SPS application and database to access, manipulate, transmit and replicate data.
- (e) Limitations. There are no test limitations that may significantly affect the evaluator's ability to draw conclusions.

Part IV - OPERATIONAL TEST AND EVALUATION OUTLINE

a. Operational Test and Evaluation Overview.

- (1) The JITC, as the Operational Test Agency (OTA) for DLA and the SPS program, conducted an Initial Operational Test and Evaluation (IOT&E) to determine the operational effectiveness and operational suitability of the SPS Increment 1. Separate and segregated IOT&Es were conducted on competing contractor products during the procurement selection process. No test results were provided during the selection process. Only the test and evaluation results on the winning contractor were provided in support of the SPS Major Automated Information System Review Council (MAISRC) Milestone II/III(A) approval. Increment 1 is being fielded.
- (2) JITC will conduct a Follow-on Operational Test and Evaluation (FOT&E) of the SPS, Increment 2. The FOT&E will determine the system's effectiveness and suitability when operated by typical trained users in a representative operational environment. The FOT&E will center around three primary activities: a combined Developmental Test/Operational Test (DT/OT) phase, formal operational testing, and Operational Assessments (OAs) focused towards the needs of those users outside the scope of the Increment 2. The table below provides an overview of the FOT&E concept. In conjunction with development testing at the OSF, the OTA will conduct combined DT/OT to help determine the system's readiness for OT&E at user test locations.
- (a) Upon meeting the OT&E entrance criteria, the OTA will perform both OAs and operational testing at select user sites. To support a MAISRC fielding decision, the OTA will conduct operational testing at user locations representative of the objective Increment 2 sites. From test results and findings, in an Independent Evaluation Report (IER) to the Milestone Decision Authority (MDA), the OTA will assess the increment's operational effectiveness and suitability.
- (b) Concurrent to the operational testing, the OTA will perform OAs at select Army and Air Force sites. Although these Services are not intended to receive SPS until after Increments 2, the OA findings will provide valuable early information to the Program Manager as to required areas of program enhancement to achieve operational effectiveness and suitability within these procurement environments. The OTA will include the OA findings as an attachment to the IER.
- (3) Since SPS is being acquired through an incrementally developed program, the operational test and evaluation (OT&E) will be conducted as each future increment successfully completes the developmental test and evaluation (DT&E) phase.

Table 7 - SPS Increment 2 FOT&E Overview

Test Particulars	Combined DT/OT	Operational Test	Operational Assessment
OBJECTIVE	Determine the operat Increment 2	ional effectiveness and	suitability of SPS
PURPOSE	Verify readiness for operational testing at user locations	Support Increment 2 fielding decision	Investigate effectiveness/ suitability at sites beyond Increment 2 locations
CONFIG- URATION	- DT configurations - Changing base- line	Increment 2 software, infrastructureFrozen, configuration	
LOCATIONS	Operational Support Facility (OSF), Sterling, VA	Sites representative of objective Increment 2 locations (see table 9)	Post Increment 2 Army and Air Force lead test sites
DATA COLLECTION METHOD	- Observe DT activities - Review DT data - OTA-introduced tests	Actual system usageOTA-introduced scenariosPerformance measurement	Surveys/question- nairesInterviewsObservations
PRODUCT and CONSUMER	Input to Operational Test Readiness Review (OTRR)	Independent Evaluation Report (IER) to Milestone Decision Authority (MDA)	Attachment to IER for benefit of Program Manager

- **Critical Operational Issues (COIs).** The COIs are questions about the system that, when resolved, will assist in determining the SPS's operationally effectiveness and suitability. Based on user-validated requirements and thresholds, the OTA will coordinate with users to develop test measures and criteria for each of the following system COIs:
- (1) <u>COI 1 Mission Performance</u>. Does the SPS enable procurement officials to complete required procurement processes? (*Effectiveness*)
- (2) <u>COI 2 Compatibility, Interoperability and Integration.</u> Is the SPS compatible and interoperable with other systems with which it must interface? (*Effectiveness*)
 - (3) COI 3 Usability. Is the SPS usable in the operational environment? (Suitability)
- (4) <u>COI 4 Security.</u> Does SPS provide adequate security for system operations and data? (*Suitability*)
- (5) <u>COI 5 Supportability</u>. Is the SPS supportable in the operational environment? (*Suitability*)
- c. Future Operational Test and Evaluation.

- (1) <u>Configuration Description.</u> With the exception of the combined DT/OT phase, all OT&E test locations will have a production representative system configured according to user's functional and infrastructure requirements. The PM is not currently proposing to incorporate legacy system interfaces with the initial Increment 2 baseline; as such, legacy interfaces will not be part of the operational test site configurations. Interface testing of site specific legacy and/or migration systems will be accomplished when they become available. When interfaces are delivered, the OTA will conduct an operational assessment to verify the accuracy and validity of previously collected data and to ensure the changes introduce no adverse operational impacts. The results of these OA may be used in support of a limited fielding decision.
- (2) <u>Objectives.</u> Through combined DT/OT activities and operational testing the OTA will determine the operational effectiveness and suitability of SPS within the Increment 2 fielding environment. Additionally, through OAs at Army and Air Force lead test sites the OTA will provide insight into the operational effectiveness and suitability of SPS in sites beyond the scope of currently planned Increment 2 fieldings.

<u>Events, Scope of Testing, and Scenarios.</u> The OTA will focus OT&E activities on Increment 2's new system functionality, unique environmental influences (*e.g.*, *business practices and interface*) not addressed in prior testing, and on areas of significant operational risk to user's mission accomplishment. Specific OT&E activities will center on the following activities:

(a) Combined DT/OT. In conjunction with development testing at the OSF, the OTA will collect preliminary OT&E data through combined DT/OT activities. The combined DT/OT will focus on the underlying technical aspects of system functionality, performance, security, reliability, availability, and recoverability contributing to SPS's operational effectiveness and suitability. The OTA will collect relevant data through observation of DT activities, review of DT test data and results, and the introduction select test scenarios. Through this phase of OT&E the OTA will gain exposure to Increment 2 of SPS capabilities, develop/revise test scenarios and questionnaires, and collect data to address operational issues. Additionally, combined DT/OT data will serve as input the Operational Test Readiness Review (OTRR) where the system's readiness for operational testing at user locations will be determined. The OTRR exit criteria is listed in the table below.

Table 8 - Operational Test Readiness Review (OTRR) Exit Criteria

Program Manager confirms:

- Operational Requirements Document (ORD) and Test and Evaluation Master Plan (TEMP) approved.
- System baseline frozen and configuration managed.
- System operator training, documentation, and logistics support in place.
- System installed at test locations in configurations representative of the increment*s end-objective sites.
- Workarounds for all open Priority 3 trouble reports documented and made available to users.
- Full or interim security accreditation completed for the increment.
- System Year 2000 (Y2K) issues addressed.
- System is safe to operate.

Development Tester, supporting the Program Manager, confirms:

- DT exit criteria satisfied.
- Critical Technical Parameters (CTP) met.
- No open Priority 1 or 2 trouble reports.
- System interfaces and interoperability verified.

Operational Tester confirms:

- OT&E plans approved.
- Tester/data collectors ready to test.

Test site Commanders/User representatives confirm:

- Understanding and support of testing at their locations.
- Procurement specialists and system administrators system-trained, in place, and ready to test.
- Site configuration installed and functional.

(b) Operational Testing. Upon OTRR approval to proceed with operational testing, the OTA will conduct testing at the sites identified in the table below. Testing will focus on the operational aspects of the issues addressed in the combined DT/OT, along with training, usability, and supportability issues. The OTA will collect test data both through observation and measurement of operator's actual system usage and through OTA-introduced, operator executed operational scenarios. The operational scenarios will address pre-award, award, and post-award procurement functions. Additionally, the OTA will collect usability and training data through observation, interview, and questionnaire results gathered from the users. The OTA will document its assessment of Increment 2's operational effectiveness and suitability in an IER to be provided to the MDA to support a system fielding decision. The IER will highlight the system's functionality and capabilities, along with identifying the operational impact of system deficiencies and user requirements not met.

Table 9 - SPS Increment 2 Candidate Operational Test Sites

Location	Service/	Primary Procurement Function	# of Users
	Agency		Supporting Test

FISC San Diego, CA	Navy	Wide range of Services	34
DITCO Scott AFB, IL	DISA	Telecommunications	14
11th CONS/LGC Bolling AFB, Washington D.C	Air Force	Base Operations, Special Studies	12
Contract Division Camp Lejeune, NC	Marine Corps	Base Operations	17
DPSC Philadelphia, PA	DLA	Clothing, Texiles, Subsistence	27
NSWC, Crane, IN	Navy	Construction, Architecture, Services	10

- (c) Operational Assessments. At lead Army and Air Force sites, out side the scope of the proposed Increment 2 fielding, the OTA will conduct OAs. The OAs will focus on Increment 2's ability to meet the needs of the Army and Air Force. The OTA will provide OA findings as an attachment to the IER to assist the PM in ensuring future increments met the needs of these Services. The OTA will collect OA data through questionnaires and interviews issued to procurement specialists at the lead sites. Additionally, in the OAs the OTA will capture the specific findings of the lead site test participants, gathered through their formal and informal interaction with Increment 2. The OTA will conduct the OAs at: HQ AETC, Randolph AFB, TX; HQ AFMC, Wright Patterson, AFB, IL; and HQ USAISSDCL, Ft Lee, Va.
- (3) <u>Future OT&E</u>. Beyond Increment 2, the OTA will plan and conduct further OT&E tailored to the specifics of future SPS increments. The OTA will focus OT&E activities on new system functionality, unique environmental influences (*e.g.*, *business practices and interface*) not addressed in prior testing, and on areas of significant operational risk to user's mission accomplishment. Future OT&E activities will be described in updates to this TEMP.
- (4) <u>Limitations</u>. In the operational environment some procurement actions (e.g., from solicitation initiation to contract award.) take longer to accomplish than the scheduled duration of the operational test. Accordingly, there is a limitation to the realism of some of the OTA-introduced operational scenarios addressing these lengthy procurement actions. This may affect the data collected to address some of the FOT&E measures of performance. To offset this limitation the OTA will develop special test scenarios to ensure that a representative sampling of procurement actions are generated.
- **d.** Live Fire Test and Evaluation. Live Fire Test and Evaluation does not apply to an Automated Information System acquisition such as the SPS.

PART V TEST AND EVALUATION RESOURCE SUMMARY

a. <u>Summary of Key Test and Evaluation Resources</u>. This sections summarizes all key test and evaluation resources, both government and contractor, which will be used during Increment 2 of the SPS acquisition program. The table below presents a summary of the test and evaluation resources.

- (1) Test Articles. Test articles include SPS software with documentation, test plans, and user manuals.
- (2) Test Sites and Instrumentation. There were three test activities for Increment 1 after FCD was concluded: developmental testing (including DEM/VAL at user sites), security testing, and OT&E. For the DEM/VAL, various procurement sites and a Defense MegaCenter remote database server was provided by the Military Departments and Defense Agencies. Security testing was accomplished at the SPARTA Security Test Facility (NSA support contractor) in Columbia, Maryland. OT&E was conducted using the Government sites already selected for DEM/VAL, and included the Defense MegaCenter remote database server, which operationally employed the SPS software capabilities. For Increment 2, developmental testing is being conducted at the Operational Support Facility (OSF), Sterling, Virginia. The FOT&E sites are listed at Table 9.
- (3) Test support equipment. For DEM/VAL, IOT&E, and FOT&E the equipment is provided by the Service/Agency responsible for the site. The number of users/workstations is dependent upon local procurement community and configuration requirements (see Appendix G).
- (4) Interoperability Agreements. Interoperability certification requirements for SPS interfaces are defined in the Operational Test and Evaluation Plan. JITC will act as the lead certification agency, with Service operational test participation.
- (5) Operational Force Test Support. Operational test will be conducted during actual operations using actual user and support personnel. The normal system support will be required as would be required during live operations.
- (6) Test Simulations, Models, and Test beds. DISA Operational Support Facility, Sterling, Virginia and SPARTA Security Test Facility, Columbia, Maryland.
 - (7) Special Requirements. Currently, there are no special requirements.
- (8) Test and Evaluation Funding Requirements. This section provides an estimate of the known funding required to pay direct costs of planned testing, by Fiscal Year and program element.
- (9) Manpower/Personnel Training Requirements. The SPS Test Coordinator will oversee each test. Each agency and service will provide personnel commensurate with the number of sites during each test. The software provider will provide the on site training for both functional users and systems administrators.

Table 10. Test and Evaluation Resource Summary

TEST	DT&E	FOT&E
RESOURCES	Increment 2	Increment 2
Test Articles	SPS Software Documentation, Test Plans and User Manuals	SPS Software Documentation, Test Plans and User Manuals

TEST RESOURCES	DT&E Increment 2	FOT&E Increment 2
Test Sites	- Operational Support Facility, Sterling, VA - Defense Mega Center, Columbus, OH	Government Test Sites: - FOT&E Sites DLA: - DPSC, Philadelphia, PA Navy: - FISC San Diego, CA - NWSC Crane, IN Marine Corps: - Contracts Division, Camp Lejeune, NC Air Force: -11th Contracting Sqdrn, Other: - DITCO, Scott AFB, IL using Remote Server @ Defense MegaCenter, Columbus, OH Government Operational Assessment Sites: Air Force: - HQ AETC, Randolph, AFB, TX - HQ AFMC CO/PKB, Wright-Patterson AFB, OH Army: - DASA(P)/USAISSDCL, Ft Lee, VA
Test Support Equipment	See Appendix G for the OSF	See Appendix G for remote server
Interoperability Agreement	N/A	Interfaces will be Certified by JITC
DEM/VAL	N/A	N/A
Simulations, Models and Testbeds	DISA Operational Support Facility, Sterling, VA SPARTA Test Facility, Columbia, MD	None
Special Requirements	None	None
T&E Funding Requirements -Functional Costs (Manpower Only)	300K	600K
-Current Shortfall	0	0

TEST	DT&E	FOT&E
RESOURCES	Increment 2	Increment 2
Manpower / Training	Test Coordinator - 1 JITC Test Director (DT) - JITC Support Contractor Personnel - 4	Test Coordinator - 1 JITC Test Director (OT) - 1 JITC Support Contractor Personnel (5) - Defense MegaCenter (2) Sys Admin Test Site (Number of Participating Procurement and Contract Management Specialists) Government FOT&E Test Sites: DLA: - DPSC, Philadelphia, PA (25) Users, 2 Sys Adm Navy: - FISC San Diego , CA (32) Users, 12 Sys Admin - NWSC, Crane, IN (8) Users, 2 SysAdmin Marine Corps: - Contracts Division Camp Lejeune, NC (15) Users, 2 SysAdmin Air Force: - 11th Contracting Sqdrn, Bolling AFB, Wash DC., (10) Users, 2 SA Other: - DITCO, Scott AFB, IL (12) Users, 2 SysAdmin using Remote Server @ Defense MegaCenter, Columbus, OH Government Operational Assessment Sites: Air Force: - HQ AETC, Randolph AFB, TX (20) Users, 2 Sys Admin - HQ AFMC CO/PKB, W-P AFB, OH (15)Users, 2 SysAdmin Army - DASA(P)/USAISSDCL, Ft Lee, VA (10) Users, 2 SysAdmin

Note: Test and Evaluation Resource Summary for Increments 3 and 4 are yet to be determined.

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APPENDIX B ACRONYMS

A&T Acquisition and Technology

ACCEPT Acceptance Test

AF Air Force
AFB Air Force Base

AFMC Air Force Materiel Command
AIS Automated Information System

AL Alabama

AMIS Acquisition Management Information System

ANSI American National Standards Institute

Ao Operational Availability

APADE Automation of Procurement and Accounting Data Entry

API Application Program Interface

AQC Acquisition Management, Contract Management

AQP Acquisition Management, Procurement BCAS Base Contracting Automation System

BLSM-C Base Level System Modernization - Contracting

BOSS Base Operations Support System

C4I Command, Control, Communications, Computers and

Intelligence

CAN Corporate Administration-Information Services

CAPT Captain, U. S. Navy

CCR Central Contractor Registration

CD Commercial Derivative

CDMS Contracting Data Management System

CE Continuous Evaluation
CFS Center for Standards
CI Computer Interface

CII Compatibility, Interoperability, and Integration

CIM Corporate Information Management
CISS Center for Information Systems Security

COE Common Operating Environment

COI Critical Operational Issue COOP Continuity of Operations

COTS Commercial Off-The-Shelf Software

CTP Critical Technical Parameters

D.C. District of Columbia

DCMC Defense Contract Management Command

DDDS Defense Data Dictionary System
DDP Director of Defense Procurement

DE Developmental Evaluator
DEM/VAL Demonstration/Validation

DFAMS Defense Fuels Automated Management System

DFARS Defense Federal Acquisition Regulation Supplement

DFAS Defense Finance and Accounting Service

DII Defense Information Infrastructure

DITCO Defense Information Technology Contracting Office

DISA Defense Information Systems Agency

DISMS Defense Integrated Subsistence Management System

DISN Defense Information Systems Network

DLA Defense Logistics Agency
DMC Defense MegaCenter
DoD Department of Defense

DoDI Department of Defense Instruction

DOS Disk Operating System

DOT&E Director, Operational Test and Evaluation DPACS DLA Pre-Award Contracting System

DPCSC Defense Procurement Corporate Information Management

SystemsCenter

DSDC DLA System Design Center

DT&E Developmental Test and Evaluation
DTRR Developmental Test Readiness Review

DTSE&E Director, Test, Systems, Engineering and Evaluation EC/EDI Electronic Commerce/Electronic Data Interchange

EC Electronic Commerce

EDI Electronic Data Interchange FAR Federal Acquisition Regulation

FASA Federal Acquisition Streamlining Act
FCD Functional Capabilities Demonstration
FDDI Fiber Distributed Digital Interface

FOC Full Operational Capability

FOT&E Follow-on Operational Testing and Evaluation

FT Fort Georgia

GAO Government Accounting Office

GUI Graphical User Interface
IAW In Accordance With

ICD Interface Control Document
IER Independent Evaluation Report

IL Illinois INC Increment

IOC Initial Operational Capability
IOT Independent Operational Tester

IOT&E Initial Operational Test and Evaluation

IPC Information Processing Center

IPR In Progress Review

IPS Integrated Procurement System

I&RTS Integration and RunTime Specification

IT Information Technology

ITIMP Integrated Technical Item Management Procurement System

JIEO Joint Interoperability and Engineering Organization

JITC Joint Interoperability Test Command

JLSC Joint Logistics System Center JTA Joint Technical Architecture

LAB Laboratory

LAN Local Area Network

MAISRC Major Automated Information System Review Council
MAOPR Minimum Acceptable Operational Performance Requirement

MHZ Megahertz

MOCAS Mechanization of Contract Administration Services

MPP Massively Parallel Processing

MS Milestone

MTBF Mean Time Between Failure

MTBOMF Mean Time Between Operational Mission Failure

MTTR Mean Time to Repair

MTTRF Mean Time to Restore Function

NDI Non-Development Item
NEP Network Entry Point
NSA National Security Agency
OA Operational Assessment

OH Ohio

OMF Operational Mission Failure

ORD Operational Requirements Document
OSD Office of the Secretary of Defense

OSE Open Systems Environment
OSF Operational Support Facility

OT Operational Testing

OT&E Operational Test and Evaluation

OTA Operational Test Activity

OTRR Operational Test Readiness Review
OUSD Office of the Under Secretary of Defense

PA Pennsylvania

PC Personal Computer

PCIM Procurement Corporate Information Management Council

PM Program Manager

PMO Program Management Office

POP Point of Presence

RAM Reliability, Availability, and Maintainability

RFP Request for Proposal SA Service/Agency

SAACONS Standard Army Automated Contracting System
SAMMS Standard Automated Materiel Management System

SDW Shared Data Warehouse

SMP Symmetric Multi-Processing

SPEDE SAMMS Purchase by Electronic Data Exchange

SPR System Problem Report
SPS Standard Procurement System
SQL Standard Query Language
SSA Source Selection Authority

SSAC Source Selection Advisory Council
SSEB Source Selection Evaluation Board
ST&E Security Test and Evaluation

T&E Test and Evaluation

TAFIM Technical Architecture for Information Management

TBD To Be Determined

TEMP Test and Evaluation Master Plan
TER Test and Evaluation Report

TEWG Test and Evaluation Working Group

TRM Technical Reference Model

TX Texas

UPS Uninterruptible Power Source

UDF User Defined Files

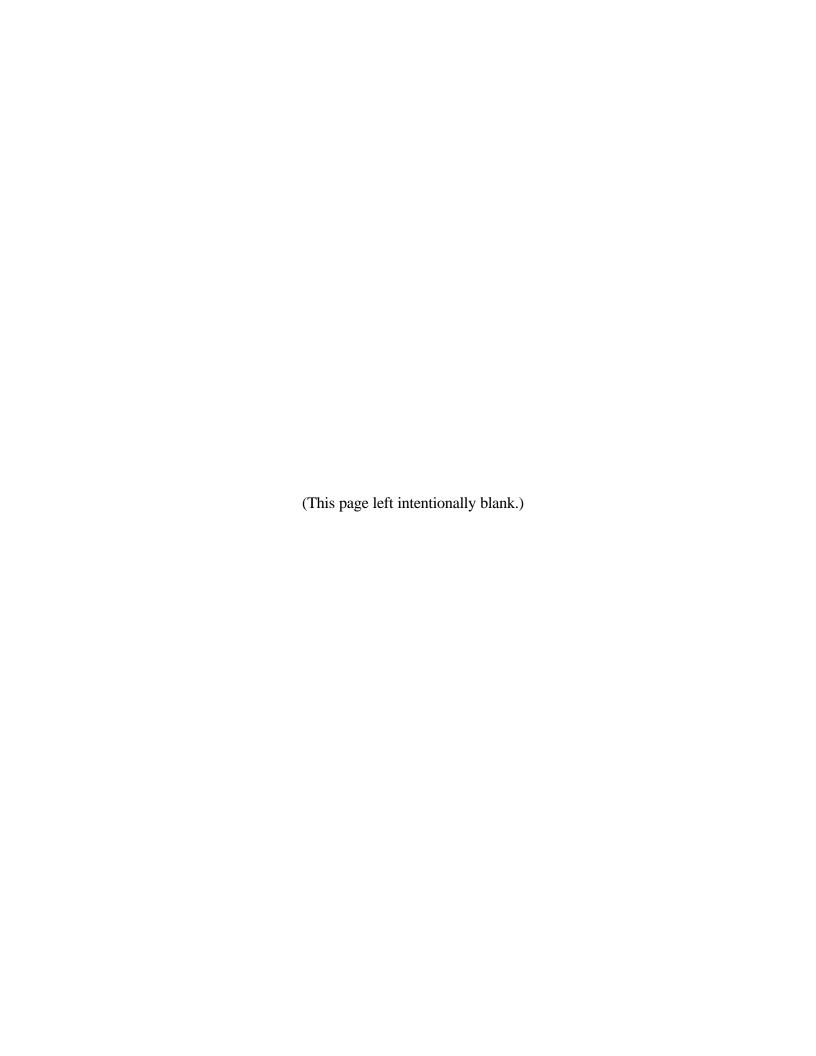
USN U. S. Navy VA Virginia

WAN Wide Area Network

WIPT Working-Level Integrated Product Team

APPENDIX C POINTS OF CONTACT

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APPENDIX D TABLE D-1. CTP / Measures of Effectiveness Relationship

	Measures of Effectiveness				
Critical Technical Parameter (CTP)	Data*	Function- ality *	Report- ing*	On-Line Historical Information	Information Warfare Activities
Accuracy - Operational data	X				
Security - Unauthorized access and intrusion					X
Security - Acceptance according to authorization and privileges					X
Security - Rejection of incorrect passwords/IDs					X
Security - Rejection of incorrect functional attempts					X
Security - Log-off after selected time-out duration					X
Security - Protection (rejection of unauthorized attempts)					X
Timeliness - Mandatory contract reporting			X		
Timeliness - Ad hoc management reports			X		
Timeliness - On-line capability to receive, store, and retain historical audit information				X	
Response Time - Visual and/or aural indication to the client user that the task or function has started from the time the user completes the initiating command		X			
Response Time - Application ready to receive a new command after exiting the prior command		X			
Response Time - Allows subsequent user commands after task or function completion		X			

		N	Aeasures of	Effectiveness	
Critical Technical Parameter (CTP)	Data*	Function- ality *	Report- ing*	On-Line Historical Information	Information Warfare Activities
Processing Time - Time for task or function to be completed, operational database to be updated, and the user presented with a visual or aural indication		X			
Data Relevance - Operational data	X				
Data Currency - Operational data	X				
Data Edits - Identify errors and reject incorrectly entered data	X				
Data Entry - Single data entry	X				
Data Integrity - "Read only" data	X				
Data Integrity - Changeable data	X				

Note: Only measures of effectiveness which have corresponding CTPs are listed.

^{*} Data includes: Data Accuracy, Data Relevance and Currency, Data Edits, Single Data Entry, and Data Integrity. Functionality includes: Full Functionality, Ease of Use, and Functionality Response. Reporting includes: Mandatory Contract Reporting and Ad Hoc Management Reports.

TABLE D-2. CTP/Measures of Suitability Relationship

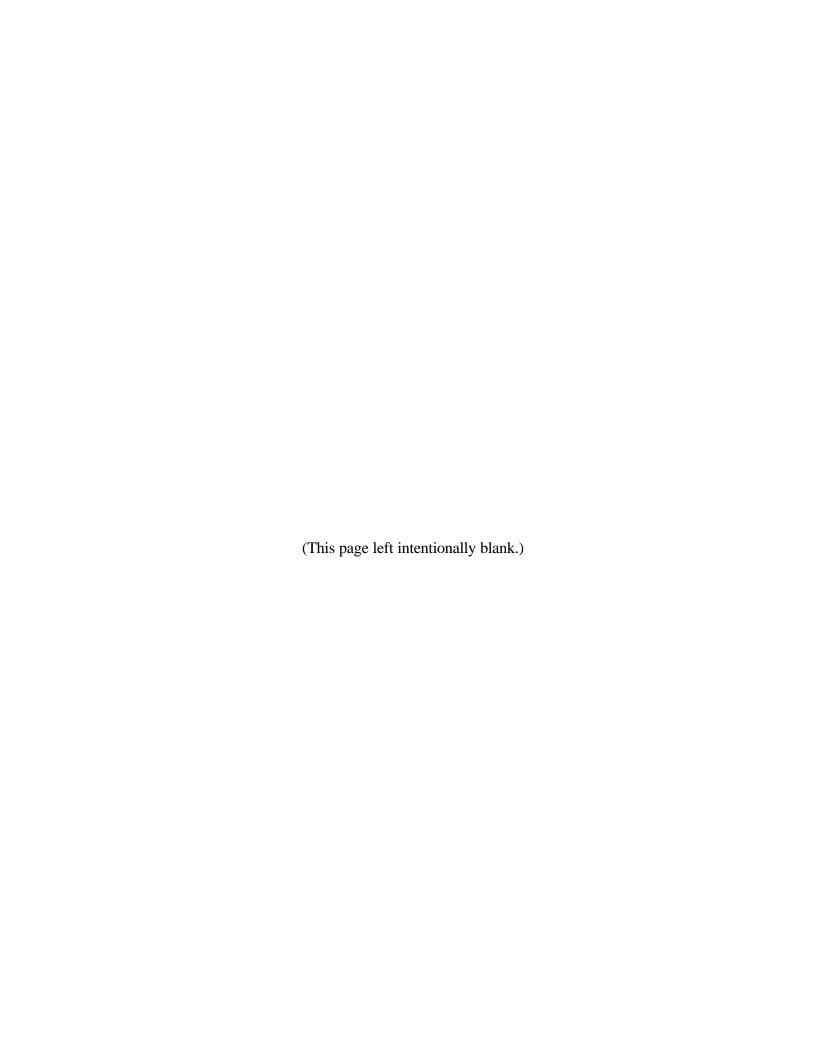
	Measures of Suitability						
Critical Technical Parameter (CTP)	Interoperability	Data Standardization	EC/EDI	Data Recovery and Restoration	System Availability	Site Reliability	
Interoperability - Interoperable with non-procurement legacy systems	X						
Interoperability (Data Standardization) - Accepts and processes standard data contained in the DoD Standard Data Dictionary and legacy systems data that has been converted to operate with SPS		X					
EC/EDI - User defined files generated by SPS			X				
Recovery and Restoration - Recovery of all operational data and restoration to the operational database				X			
System Availability - System Availability					X		
Site Reliability - Site Reliability for client-server and stand-alone						X	

Note: Only measures of suitability which have corresponding CTPs are listed.



APPENDIX E TABLE E-1. Measures of Effectiveness and Suitability/COI Relationship

		Critical O	perational Is	sue (COI)	
Measures of Effectiveness and Suitability	Performance	Compatibility, Interoperability, and Integration	Usability	Security	Reliability, Availability, and Maintainability
Data (Data Accuracy, Relevance and Currency; Data Edits; Single Data Entry; and Data Integrity)	X		X		
Functionality (Full Functionality; Ease of Use; and Functionality Response)	X		X		
Reporting (Mandatory Contract Reporting and Ad Hoc Management Reports)	X				
System Security				X	
On-line Historical Information	X	X			
Data Standardization		X			
Information Warfare Activities				X	
Interoperability		X			
EC/EDI	X	X			
SPS System Availability					X
Site Reliability					X
Ease of System Administration and Database Administration	X		X		
Data Recovery and Restoration					X
System Supportability			X		X
Surge Capability	X				X
Technical Supportability					X



APPENDIX F

Legacy and Automated Information Systems

- Acquisition Management System Contract Administrative Data
- Acquisition Management System Distributed Processing of Contractual Information
- Acquisition Management System Other
- Acquisition Management System Procurement Management System
- Acquisition Management System Source Data Automation
- Acquisition Management System Tracking Undefinitized Requirements and Funds for AFP Acquisition Planning and Tracking System
- * Air Force Materiel Command Suite Acquisition and Due-In System
- * Air Force Materiel Command Suite Automated Contract Preparation System
- * Air Force Materiel Command Suite Automated Purchase System
- * Air Force Materiel Command Suite Contracting Information Data Base System
- * Air Force Materiel Command Suite Contracting Manpower Management Systems
- * Air Force Materiel Command Suite Mechanized Bidder's List System
- * Air Force Materiel Command Suite Other
- * Air Force Materiel Command Suite Undefinitized Contract Action Management System Architect-Engineers Contract Administration Support System
- **Automated Contracting System**
- Automated Information and Documentation System
- * Automation of Procurement and Accounting Data Entry
- * Base Contracting Automation System DISA Automated Information System
- * Base Contracting Automation System Menu Assisted Data Entry System II
- * Base Contracting Automation System Other
 - Base Level System Modernization
- * Base Operation Supply System
 - Commodity Command Standard System Other
 - Commodity Command Standard System Procurement Automated Data and Document System
 - Commodity Command Standard System Procurement Automated Manpower Utility and Projection System
- Construction Contractor Appraisal Support System
- Contract Administration Management Information System
- Contract Administration Services Automated Information System
- Contract Audit Follow-up System
- Contract Data Management System
- Contract Directorate Automated Information System
- Contract Directorate Management System
- Contracting Automated Tracking System
- Contractor Performance Assessment Reporting System
- Contractor Profile Data System
- Contractor Profile System Navy
- * Defense Fuels Automated Management System
- * Defense Integrated Subsistence Management System
- * DLA Pre-Award Contracting System DLA Vendor Rating System
- * DLA Pre-Award Contracting System Other
 - **Integrated Procurement System**
- * Integrated Technical Item Management Procurement System
- * Mechanization of Contract Administration Services
- * Mechanization of Contract Administration Services Contract Management Paperless Automated Support System
- * Mechanization of Contract Administration Services Contractor Profile System
- * Mechanization of Contract Administration Services In-Plant Quality Assurance Representative
- * Mechanization of Contract Administration Services Other
 - Modification and Claims Module

OCNR Management Information System

On-Line Acquisition Regulation System

Plant Representative Office Local Area Network Solution

Price History Database

Procurement Action Status Report

* Procurement Automated Data Document System

Procurement Early Development

Production Base System

Research and Development Management Information System

Small Purchase Electronic Competitive System

- * Standard Army Automated Contracting System Other
- * Standard Army Automated Contracting System Procurement Reporting Management Information System
- * Standard Automated Contracting System

Standard Automated Materiel Management System

Standard Automated Materiel Management System - Automated Small Purchase System 1

Standard Automated Materiel Management System - Automated Small Purchase System II

Standard Automated Materiel Management System - Commodity Oriented Procurement System

Standard Automated Materiel Management System - Contractor Operated Parts Depot

Standard Automated Materiel Management System - Paperless Order Placement System

Standard Automated Materiel Management System Procurement by Electronic Data Exchange

UICP Purchase

Undefinitized Contractual Action Presentation System

Weighted Guideline System

^{*} The PCIM Council designated the indicated systems as legacy systems in the RFP.

APPENDIX G TEST ARTICLE CONFIGURATIONS

TABLE G-1. Test Article Configurations

Test Article or Test Location	Configuration
OSF Sterling, VA Testing will include standalone, LAN, and WAN configurations with connection to the Defense MegaCenter, Columbus, OH.	File Server (2) - Intel Pentium 90MHZ PCI (49MB RAM, 2 X 2GB removable SCSI hard disks, 3.5" FDD, 5.25" FDD, 6X CD ROM, two serial ports, one parallel port), 32-bit PCI Network Interface Card, 2 GB DAT Tape Backup Unit, 14.4 kbps Hayes-compatible modem
	File Server Software - Windows NT 3.5.1, MS Office, Lotus SmartSuite, and WordPerfect Office
	Other Equipment: Stop Watch (1) for timing events
	Unix Server (1) Hardware - HP-9000 in K-400 configuration (4 processors, 512MB RAM, 4X2 GB disk packs, 3.5" FDD, 4mm tape drive, CD ROM)
	Unix Server (1) Hardware - HP-9000 in I70 configuration (2 processors, 212MB RAM, 8X1GB disk packs, 3.5" FDD, 4mm tape drive, CD ROM)
	Unix Servers' Software - HP-UX 10.10
	Workstation (30) - Intel Pentium 100MHZ (16 MB RAM, 1.02GB hard disk, 3.5" FDD, 5.25" FDD, CD ROM, two serial ports, one parallel port, two PCMCIA Type II), 17" SVGA monitor, SMC88216C Network Interface Card, Serial Mouse, HP 4 Plus LaserJet (Stand-alone only) MS DOS 6.22/MS-Windows for Workgroups 3.11 and TCP/IP, Microsoft NET BEUI
OSF Sterling, VA (cont.)	SunSPARC Server 20 (1) with 2 external hard disk drives

Test Article or Test Location	Configuration
	DEC Alpha Server (2) - 4MB hard disk drive, 132MB RAM, CD ROM, 3.5" floppy disk drive
	Stand Alone Workstations (2) - Micronics Pentium 100MHZ, 16MB RAM, 1.02 GB hard disk drive.
SPARTA Security Test Facility (NSA Support Contractor) Testing will be accomplished on LAN configuration.	Server (2) - Pentium processor, 133MHZ (16 MB RAM, 1GB SCSI-II hard disk, 3.5" and 5.25" floppy disk drives, 6X speed SCSI-II CD ROM); this server will be used to host the server-side of any SPS applications based upon Windows NT 3.5.1 Workstation (12) - Pentium processor (16 MB RAM, 1GB IDE hard drive, 2 PCMCIA Type II interfaces), running Windows for
	Workgroups 3.11
FOT&E site: DPSC, Philadelphia, PA Note: Training and OT will be conducted in a training facility.	Workstation (11) - Pentium processor, 133MHZ (32MB RAM, 1.2 GB hard disk, 3.5 FDD, 1 serial port, 1 parallel port), 6X CD ROM, 13" monitor, Windows 3.11, HP LaserJet 4M printer.
Testing will be accomplished on a LAN configuration.	Server (1) - HP 9000, in I-70 configuration, (dual 96MHZ processors), 402MB RAM, 48GB hard disk, 6X CD ROM) HPUX 10.10.
	Network Protocols - TCP/IP.
	Word processing and spreadsheet software: Microsoft Office

Test Article or Test Location

FOT&E site:

Fleet Industrial Supply Center - San Diego San Diego, CA

Note:

1. Training will be conducted in Building 1 in a separate room from the OT terminals. Training infrastructure: Workstation (15) Micron Pentium 120MHZ, 16 MB RAM, removable 1.2 GB Hard Drive, 1 parallel port, 2 serial ports, 17" monitor, Windows 95 with MS Office 97

Training Server is the OT server.

- 2. OT will be conducted at 2 locations:
- a. Building 1 Test and Technical areas located at: FISC

937 N. Harbor Drive San Diego, CA 92132

b. Building 116 - Remote test site located at:

Cummings Road
32d Street Naval Station
San Diego, CA 92136
(approximately 5 miles from Building 1)

Testing will be accomplished on a LAN configuration.

Configuration

Building 1:

Workstation (1) - Micron Pentium 200MHZ, 32 MB RAM, 1.2 GB Hard Drive, CD-ROM, 1 parallel port, 2 serial ports, 17" monitor, Windows 95, Office 97

Workstation (4) - Micron Pentium 120MHZ, 32 MB RAM, 2.0 GB Hard Drive, CD-ROM, 1 parallel port, 2 serial ports, 17" monitor, Windows 95, Office 97

Workstation (**5**) - Micron Pentium 166MHZ, 32 MB RAM, 1.2 GB Hard Drive, CD-ROM, 1 parallel port, 2 serial ports, 17" monitor, Windows 95, Office 97

Workstation (12) - IT 486 processor, 66MHZ, 32 MB RAM, 500 MB Hard Drive, 1 parallel port, 2 serial ports, 14" monitor, Windows 95, MS Office Suite 4.2 HP LaserJet 3 printer.

Server (1) - Compaq 5000 (5 processors), 166MHZ, 128MB RAM, 16GB hard disk, 3.5 FDD, 1 parallel port, 1 serial port, CD ROM), Novell 3.1.2

Network Protocols - TCP/IP and IPX.

Building 116:

Workstation (2) - IT 486 processor, 66MHZ, 16 MB RAM, 500 MB Hard Drive, 1 parallel port, 2 serial ports, 14" monitor, Windows 95, MS Office Suite 4.2 HP LaserJet 3 printer.

Test Article or Test Location	Configuration
FOT&E site: 11th Contracting Squadron Bolling AFB, Washington D.C. Note: User Training to be conducted at AMS Fair Oaks facility. Testing will be accomplished on a WAN configuration with connectivity to the Defense Mega Center, Columbus, OH.	Workstation (8) - DesktopV Pentium processor, 166MHZ (16MB RAM, 1.2 GB hard disk, 3.5 FDD, 2 serial ports, 1 parallel port, 2 serial ports, 1 Type II PCMCIA slot) 15" monitor, Windows 95. Unix Server (1) Hardware - HP-9000 in K-400 mid tier configuration (2 processors, 512MB RAM, 12X2GB disk packs, 3.5" FDD, 4mm tape drive, CD ROM). Unix Server Software - HP-UX 10.10. Network protocols - NETBEUI or TCP/IP Word processing and spreadsheet software: Microsoft Office 95 or Office 97.
FOT&E site: Contracting Division Camp Lejeune, NC 28547-8368 Testing will be accomplished on a LAN configuration.	Workstation (12) - Dell Optiplex GXPro Pentium processor, 180MHZ (64MB RAM, 2GB hard disk, 8XCD ROM,2 parallel ports, 1 serial port, 3.5 FDD), Windows 95. Server (1) - DELL, 200 MHZ (128 MB RAM, 6.0GB hard disk, 1 parallel port, 2 serial ports, 8X CD ROM), 15" monitor, Windows NT 4.0, HP LaserJet 4 printer). Network Protocols - TCP/IP Word processing and spreadsheet software - Microsoft Office 95, Lotus Suite

Test Article or Test Location	Configuration
FOT&E site: DITCO, Scott AFB, IL Note: Training and OT will be conducted at the same terminals in the training facility. Three of the ten terminals will host both versions of PD2 (3.1 and 3.5).	Workstation (10) - Austin with Pentium processor, 75MHZ (32MB RAM, 2GB hard disk, 3.5 FDD, 2x CD ROM, 1 parallel port, 2 serial ports, 2 Type II PCMCIA slots, 4X CD ROM) 17" monitor. Server (1) - At Defense MegaCenter (see below)
Testing will be accomplished using a WAN configuration with connectivity to the Defense MegaCenter, Columbus, Ohio	Network Protocols - TCP/IP Word processing and spreadsheet software - Excel, Word. Remote Site: Unix Server (1) Hardware - HP-9000 in K-400 mid tier configuration (2 processors, 512MB RAM, 12X2GB disk packs, 3.5" FDD, 4mm tape drive, CD ROM). Unix Server Software - HP-UX 10.10.
FOT&E site: Naval Warfare Surface Center Testing will be accomplished on a LAN configuration.	Workstations (8) Pentium 166MHZ, 32MB RAM, 2.5GB Hard Drive, CDROM, WIN 95, Win 3.11, MS Office Suite Server: (1) Pentium 200MHZ, 100MB RAM, 2.0GB Hard Drive, CD-ROM, NT4.0, Novell 3.11/ TCP/IP protocols

Test Article or Test Location	Configuration
Operational Assessment site: HQ AETC, Randolph AFB, TX Note: Training and OT will be conducted at the same terminals.	Workstation (2) - Pentium processor, 133MHZ (16MB RAM, 1.2GB hard disk, 3.5" FDD, 8X CD ROM, 1 parallel port, 2 serial ports) 17" monitor, Windows 3.1.
Testing will be accomplished using a LAN configuration.	Workstation (1) - 486 Pentium O/D processor, 133MHZ (16MB RAM, 1.2GB hard disk, 3.5" FDD, 6X CD ROM, 1 parallel port, 2 serial ports) 17" monitor, Windows 3.11.
	Workstation (1) - 486 processor, 100MHZ (16MB RAM, 333MB hard disk, 3.5" and 5.25" FDD, 1X CD ROM, 1 parallel port, 2 serial ports) 17" monitor, Windows 3.11.
	Server (1) - SunSparc 20, 73MHZ (128MB RAM, 1GB hard disk, 1X CD ROM, 1 parallel port, 1 serial port), Solaris 2.4, Banyan Vines 5.54.
	Network Protocols - TCP/IP.
	Word processing and spreadsheet software: Microsoft Office.

Test Article or Test Location	Configuration
Operational Assessment site: HQ AFMC CO/PKB, Wright-Patterson AFB, OH Note: Training and OT will be conducted at the same terminals in the training room at Bldg 125 Area B.	Bldg 125 Area B Workstation (8) - Dell XMT5100 with Pentium processor, 100MHZ (16MB RAM, 1 GB hard disk, 3.5" FDD, 4X CD ROM, 2 serial ports, one parallel port, 1 PCMCIA Type III slot), 17" monitor, Windows for Workgroups 3.11.
Testing will be accomplished using LAN and standalone configurations.	Workstation (1) - Pentium Gateway 2000, 166MHZ, 16 MB RAM, 1.6 GB Hard Drive, CD- ROM, 17" monitor, TCP/IP compatible, twisted pair cable category 5 ethernet, 10 MB network
	Server (1) - Dell XMT5100 with Pentium processor, 100 MHZ (64MB RAM, 2GB hard disk, 3.5"FDD, 4X CD ROM, 2 serial ports, 1 parallel port, 1 PCMCIA Type III slot), Windows NT 3.51, SQL Server 6.0, HP LaserJet 2 printer.
	Network Protocols - TCP/IP, NET BEUI DLC.
	Word processing and spreadsheet software - Microsoft Windows 95
	Bldg 266 Area A Workstation (1) - Pentium Megatronic, 100MHZ, 16 MB RAM, 1.2 GB Hard Drive, CD- ROM, 14" monitor, hooked into twisted pair cable, ethernet network, Window 95, MS Office

Configuration **Test Article or Test Location** Operational Assessment Site: Bldg 10204 DASA(P)/ United States Army Information Workstation (2) - Zenith 486, 66MHZ Software System Development Command -(16MB RAM, 404MB hard disk, 3.5 FDD, 1 Lee (USAISSDCL) serial port, 1 parallel port,) 14" monitor, Windows 95 and MS Office Suite. Ft Lee, Virginia 23801 HP Laserjet 4 printer Note: Training will be conducted at the OA **Server (1)** - HP 9000 755, 192 MB RAM, terminals. 6.0GB Hard Drive, 4mmDAT tape drive, 1 Equipment: 2 locations on Ft Lee. 3 remote serial port, 1 parallel port), NO CD-ROM, clients (prefer AMS to provided software HPUX 10.2 and documentation so they can load the remote sites) **Server (1)** - Sequent ELS, 64MB RAM, 3.0GB Hard Drive, 1/4" streamer drive, 1 Testing will be accomplished using LAN and serial port, 1 parallel port), NO CD-ROM SEQ DYNIX/PTSv2.1.5 WAN configurations. **Server (1)** - Unisys 6000, 64MB RAM, 1.0GB Hard Drive,4mmDAT tape drive and 1/4" streamer drive, 1 serial port, 1 parallel port), NO CD-ROM Network Protocols - TCP/IP. Word processing and spreadsheet software: Microsoft Suite. Bldg 12500 using servers at Bldg 10204 Workstation (3) Pentium, 200 MMX, 32 MB RAM, 2.0GB Hard Drive, CD-ROM, 3.5 FDD, NT LAN, TCP/IP TELENET, using NT4.0 WS, MS Office 97 Workstation (1) Pentium, OD 83, 16 MB RAM, 1.GB Hard Drive, CD-ROM, 3.5 FDD, NT LAN, TCP/IP TELENET, using WIN 95, MS Office **Workstation** (1) 486, 66 MHZ, 16 MB RAM, 404MB Hard Drive, NO CD-ROM, 3.5 FDD, NT LAN, TCP/IP TELENET, using WIN 95, MS Office

Operational Assessment Site: Continued DASA(P)/United States Army Information Software System Development Command - Lee (USAISSDCL) Ft Lee, Virginia 23801

Janet Annan, NGB OPARC NGB ATTN: NGB-AQ Skyline Building Six, Suite 401A 5109 Leesburg Pike Falls Church, VA 22041-3201

Kevin Doyle US Army Engineer District, Louisville ATTN: CEORL-CT 600 Martin Luther King Jr Place Louisville, KY 40201- 2230

Charlot Barney US Army Engineer District, Seattle ATTN: CENPS-CT 4735 E. Marginal Way South

Seattle WA 98134-2385

206-764-3772

Remote: HQ, NGB, Falls Church, VA (Skyline 6)

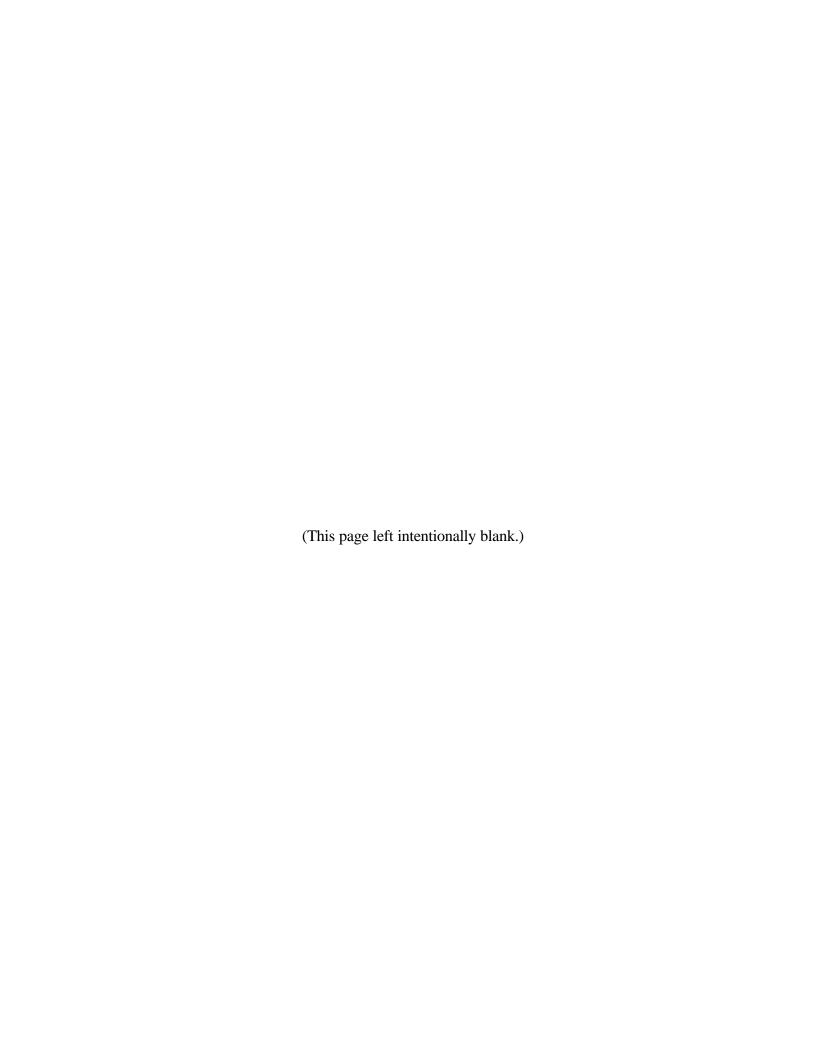
Workstation (1) Pentium, 133 MHZ, 16 MB RAM, 1.GB Hard Drive, CD-ROM, 3.5 FDD, Banyan Vines, TCP/IP TELENET, using WIN 95, MS Office

Remote: USACE, Seattle WA

Workstation (1) Pentium, 133 MHZ, 16 MB RAM, 1.2GB Hard Drive, CD-ROM, 3.5 FDD, Novell LAN, TCP/IP TELENET, using WIN 95, MS Office

Remote: USACE, Louisville, KY

Workstation (1) Pentium, 100 MHZ, 16 MB RAM, 1.2GB Hard Drive, CD-ROM, 3.5 FDD, Novell LAN, TCP/IP TELENET, using WIN 95, MS Office



APPENDIX H

SPS Functionality by Increment

SPS SOW	I	ncre	eme	nt	Cor	respond	ing	
Reference	1	2	3	4	MOS	MOE	CTP	STATEMENT
								FUNCTIONAL REQUIREMENTS
2.1								GENERAL SYSTEMS REQUIREMENTS
2.1.1								PROVIDE OPERATIONAL CHARACTERISTICS
2.1.1(A)	X					8		Permit manual performance of automatic functions and data entry from off-line processes, and allow users to override system defaults to continue processing and log such overrides in the audit trail.
2.1.1(B)	X			X		2 4		Automatically establish and display contract data and documentation based on the user's function, and adjust for component or site-specific procedures.
2.1.1(C)	X					2	-	Provide capability to initiate any system process from any starting point.
2.1.1(D)	X					2		Provide capability for on screen help/tutorials.
2.1.1(E)		X				2	-	Automatically notify user when checklist items or portions of sequential processes have been overlooked.
2.1.1(F)	X					2	-	Provide capability to resume an interrupted action.
2.1.1 (G)	X					2	M,N 0,P	Provide capability to preview documents, reports & query results prior to printing.
2.1.1(H)	X			X		2		Establish print format criteria for documents, reports, and query results, and identify which documents and reports will be automatically printed.
2.1.1(I)	X					1 2		Allow read-only access to solicitation responses, and permit the user to concurrently perform and view multiple processes/applications/documents.
2.1.1(J)	X					2	-	Allow the user to establish internal and external distribution and communication requirements, and internal review and approval chains.
2.1.1(K)		X	X			2	-	Provide capability to perform measurement conversions (and monetary conversions).
2.1.1(L)	X					2	-	Provide capability to receive, recognize, generate & manipulate dates for the year 2000 & beyond.
2.1.2								MAINTAIN DATA
2.1.2(A)	X	X	X	X	3	5 6	L W	Capture procurement-related documents/information/data (including but not limited to cost accounting standards disclosure statements, contractor financial statements, cost or pricing data, corrective action plans, pre-award surveys, and contractor system reviews) for storage, categorization, cross-referencing, tracking and linking from internal and external sources.

SPS SOW	Iı	ıcre	mei	nt	Cor	respond	ing	
Reference	1	2	3	4	MOS	MOE	CTP	STATEMENT
2.1.2(B)	X	X				2 4	M,N	Enter a weapons system or program code and search for information on related procurement actions, access data and time information on specific processes to support activity-based costing, determine the number and identity of electronic respondents to solicitations prior to opening/closing dates, access contractor cost performance data, and search data repository or operational database and retrieve and manipulate information based on ad-hoc user-defined parameters.
2.1.2(C)	X		X			2	-	Provide capability to access the data dictionary.
2.1.2(D)	X	X	X			2 4		Create reports and perform calculations using user-defined criteria, and establish criteria to identify the procurement action type for which automatic processing is authorized.
2.1.2(E)	X					6	В	Identify the current version of data values, permit the user to select the version to be used in subsequent processes, and permit the user to revise data values without corrupting the original data values (regardless of data ownership).
2.1.3								MANAGE DOCUMENTATION
2.1.3(A)	X					2	-	Automatically assign documents, received & generated, with unique control numbers.
2.1.3(B)	X					2	-	Record local date and time that the user completes or updates an action, or when documents are received or transmitted, including the originator of any transmission received.
2.1.3(C)	X	X				2	-	Provide capability to establish/edit/delete a suspense for any action & define notification criteria.
2.1.3(D)	X	X				2	-	Maintain a log of all requests for information or action and their corresponding responses, integrate the log with the procurement action and corresponding documentation, and automatically forward a request or document for review/approval/distribution either sequentially or simultaneously based on the local review and approval chains of command.
2.1.3(E)	X	X				2	-	Permit access to a status summary of all outstanding requests for information or action, and notify users and reviewers with overdue responses to such requests.
2.1.3(F)	X					2	-	Provide capability to receive the notification of validated requirement from the requisitioner or item manager.
2.1.3(G)	X					2	-	Provide or prohibit access to each document based on the user profile, and allow multiple users to concurrently view the original document or file (including while it is being edited).
2.1.3(H)	X				3	2	-	Provide capability to affix electronic/facsimile signature upon user request when all appropriate actions are completed & verified in accordance with user profile.
2.1.3(I)	X				3	2	-	Provide capability to integrate attach and link imaged documents with the electronic file.
2.1.4								PROVIDE TEMPLATES FOR STANDARD PROCUREMENT DOCUMENTS DESCRIBED IN FAR/DFARS AND SERVICE/COMPONENT SUPPLEMENTS
2.1.4(A)	X	X	X	X		2	-	Have predefined data fill-in fields which can be merged with data without changing the original template and are maintained in a library.

SPS SOW	I	ncre	mei	nt	Cor	respond	ing	
Reference	1	2	3	4	MOS	MOE	CTP	STATEMENT
2.1.4(B)	X	X	X			2	1	Provide capability to create, copy or tailor templates with data fill-in fields which can be merged with data without changing the original template.
2.1.4(C)	X					2	-	Maintain both standard and user defined templates in a library, categorizing and tracking by template type. The categories of templates include but are not limited to Procurement Instruments and other award actions, determinations and findings, forms, letters and supporting contractual documentation.
2.1.4(D)	X					2		Provide capability to save all standard and user defined template data & text fields in the operational data base and or data repository.
2.1.4 (E)			X			2		Provide the capability to describe and define user-created data elements and add to the data dictionary.
2.1.4(F)	X					2	•	Provide the capability to produce the appropriate output from the templates. The output may include but is not limited to screens, print files, forms, transaction sets, or files.
2.1.5								EDIT DOCUMENTS
2.1.5(A)	X					2		Provide capability to append information to any document while viewing without changing the original document.
2.1.5(B)	X					5 8	D,E F,G,H I,L	Edit documents and provide an audit trail of changes to documents.
2.1.5(C)	X					2		Provide capability to compare documents & indicate differences.
2.1.6								PROVIDE ELECTRONIC INTERFACE CAPABILITIES
2.1.6(A)	X	X	X	X	3		W	Interface with the ED/EDI contractor registration system, allow external financial systems to access current funds availability/status/amount for all requirements, allow on-line certification of funds availability for obligation, permit the user to request and obtain vendor information and eligibility information electronically, transmit data required by component legacy systems, identify excess funds to the funds originator, and integrate import/export files or text with other applications using the host operating system/environment.
2.1.6(B)	X			X	3		W	Automatically generate the procurement instrument and other award action as a UDF or Military Standard Contract Administration Procedures (MILSCAP) transaction and update the contract record based on receipt thereof, receive/validate/record incoming EDI UDFs or MILSCAP transactions and assign to the owner for appropriate action, and automatically reject invalid data values and so notify the user.

SPS SOW	Iı	ncre	mei	nt	Cor	respond	ing	
Reference	1	2	3	4	MOS	MOE	СТР	STATEMENT
2.2								PROVIDE PROCUREMENT GUIDANCE
2.2.1								MAINTAIN A REFERENCE LIBRARY
2.2.1(A)	X					1 2	Q,R,S,	Access and import information from current official Government procurement regulations, maintain a record of the regulations and procedures, and search for clauses and provisions and view prescribing language.
2.2.1(B)	X					2		Maintain a current address directory when available of the on-line access or Internet/World Wide Web for reference documents.
2.2.2								AFFECT STATUTES, REGULATIONS, POLICIES AND PROCEDURES (SRP&P): The system shall
2.2.2(A)	X	X				2	-	Provide capability to prepare, submit, comment or process a DAR case or request for deviation and submit for approval.
2.2.2(B)			X			2	-	Maintain previous versions of any SRP&P (including changes and effective dates) by document, part, section, and clause, and link to the current version, Maintain previous versions of the FAR/ DFARS/FIRMR by document, part, section & clause.
2.2.2(C)	X					2	-	Notify users of changes to SRP&P, and permit an authorized user to draft changes/rewrites/additions to component supplements.
2.2.2(D)	X		X			1		Establish and modify clause selection logic, access superseded clauses still applicable to existing contracts, and receive electronically or permit the authorized user to enter clauses with instructions to incorporate in full text or by reference.
2.3 2.3.1								PROCUREMENT PLANNING MANIPULATE A REQUIREMENTS PACKAGE
2.3.1(A)	X	X				2	-	Receive requirements packages and amendments thereto and notify the user upon receipt.
2.3.1(B)	X	X				2	-	Determine package adequacy based upon contents, previously-entered data and user-defined criteria, and automatically reject an invalid package with description of inaccuracy.
2.3.1(C)			X			2 5	M,N 0,P	Determine and notify the user if the item(s) included in the package are covered by pre-existing award vehicles or unawarded requirements packages, or are available from mandatory sources, and automatically generate and award against the vehicle for both user-review and automatic-distribution modes.
2.3.1(D)		X				2		Automatically notify the requiring activity of formal acceptance of the package, and allow the user to formally accept or reject the package.
2.3.1(E)	X	X				2	-	Permit the user to identify package requirements to be split into separate packages or to combine requirements from two or more packages.
2.3.1(F)	X					1 5	A,L Q,R,S T,U,V	Maintain a record of canceled requirement packages & retain all related documentation in accordance with the regulatory retention requirements.

SPS SOW	Iı	ıcre	mer	nt	Cor	respond	ing	
Reference	1	2	3	4	MOS	MOE	СТР	STATEMENT
2.3.1(G)	X					2	-	Calculate the extended or total estimated cost based on procurement revisions to requirements package or based on the separation or combining of requirements.
2.3.1(H)	X	X				2		Require the user to validate manually-entered appropriation data, permit the user to request to certify or correct funds, and automatically notify the user when the award amount to be obligated differs from the commitment on the package.
2.3.1(I)	X	X				2		Display a documentation summary of any procurement and permit selection of any part of a document to view.
2.3.1(J)	X					1	A Q,R,S T,U,V	Provide capability to process a contract security classification specification.
2.3.2								CREATE CHECKLISTS
2.3.2(A)	X					2	-	Automatically establish, modify, delete and update milestones and checklists of actions necessary to reach a milestone for a particular procurement function based on user-defined criteria.
2.3.2(B)			X			2,5	L	Calculate pre- and post-award administrative lead times for the requirement based on historical data.
2.3.2(C)	X	X				2,5	L	Provide capability to record checklist & milestone completion dates & provide status in user workload.
2.3.2(D)		X				2	-	Automatically notify the user which checklist items have not been completed or have passed.
2.3.3								IDENTIFY SOURCES
2.3.3(A)		X				1	A	Allow an authorized user to maintain a class set-aside list, and automatically alert the user if an item in the requirements package is on the set-aside list.
2.3.3(B)		X				2	-	Automatically notify the user when the requirement specifies any item on the list of commodities exempt from the Buy American Act.
2.3.4								PERFORM CONTRACTOR ASSESSMENT
2.3.4(A)		X				2,5	L	Notify user when vendor information changes on a procurement.
2.3.4(B)	X		X			2 4 5	J K L	Aggregate contract performance information into contractor performance summary reports and use these summary reports along with other contractor information to create vendor rating summary reports.
2.3.5								ASSIST PROCUREMENT PLANNING
2.3.5(A)	X	X				1	A Q,R,S T,U,V	Provide capability to reference a class J&A in lieu of including a new J&A.
2.3.5(B)	X		X			1 2	A Q,R,S T,U,V	Provide capability to identify & rank the evaluation criteria & describe the evaluation scheme to be used.

SPS SOW	I	ncre	eme	nt	Cor	rrespond	ing	
Reference	1	2	3	4	MOS	MOE	СТР	STATEMENT
2.3.5(C)	X					1	A Q,R,S T,U,V	List all personnel with access to source selection or business sensitive information.
2.4								SOLICIT OFFERS and AWARD CONTRACTS
2.4.1								DETERMINE MAILING LIST
2.4.1(A)	X					2	-	(Automatically) record solicitation mailing list application data and update/rotate/purge list.
2.4.1(B)	X					2	-	(Automatically) create and update a solicitation mailing list based on Federal Supply Class, small-business size standards, user-defined criteria, vendors identified in the requirements package, and respondents to the solicitation or announcement.
2.4.1(C)	X	X				2	-	(Automatically) prepare synopses of market surveys, solicitations and awards to the Commerce Business Daily (CBD) in CBD-prescribed format (including notes thereto) and permit the user to edit before automatic transmission.
2.4.1(D)	X	X				2	-	(Automatically) receive vendor and industry responses to announcements and incorporate bid/no-bid data from the abstract function into the solicitation mailing list.
2.4.2								PREPARE SOLICITATION AND AWARD: The system shall provide the capability to:
2.4.2(A)	X					2		Establish a master solicitation template, and allow the user to create and record a procurement instrument or award document without a requirements package or which originated in other than DOD/SPS format.
2.4.2(B)	X	X				2	M,N O,P	Allow the user to create replacement pages to the document highlighting changes and revisions.
2.4.2(C)	X	X				2	M,N O,P	Automatically assemble, format, and paginate all or part of the Procurement Instrument or other award document based on user defined criteria or previously entered data.
2.4.2(D)	X	X				2		Utilize the line item system set forth in DFARS 204.71, allow for line items which are non-consecutive/non-sequential or reserved, associate multiple MILSTRIP requisitions against a single line item, and globally modify line item information.
2.4.2(E)	X					2		Effect multiple changes within a single modification and categorize them based on user-defined criteria, process multiple modifications for a given contract simultaneously and execute them in any sequence, delete an unexecuted modification from the active file while retaining a record in the contract history, and select an area within the procurement instrument or award action for change or deletion.
2.4.2(F)	X					2		Provide capability to create and copy free form text to be included within the procurement instruments, including within line items.
2.4.2(G)	X					2	-	Provide capability to structure line items to allow alternate proposals (e.g., range quantities, alternate FOB sites, alternate quantities, stepladder quantities).

SPS SOW	I	ncre	mei	nt	Cor	respond	ing	
Reference	1	2	3	4	MOS	MOE	СТР	STATEMENT
2.4.2(H)	X					2	-	Permit the user to assign multiple accounting classification reference numbers to a line or sub-line item, establish informational subline items for each accounting classification in accordance with DFARS 204.7104-1(a), and associate multiple accounting citations with a single line item.
2.4.2(I)			X			2	•	Automatically recommend contract type based on the requirement package, user defined criteria & other previously entered data.
2.4.2(J)	X					2	-	Allow for multiple line item structures and pricing arrangements in a procurement instrument or award document based on the type of requirement.
2.4.2(K)	X					2		Allow for multiple awards from a single solicitation or line item.
2.4.2(L)	X	X	X			1 2	A	Enter data to trigger clause and provision selection for inclusion in the procurement instrument, automatically select general clauses and provisions based on prescriptive language from FAR, DFARS, component supplement, user-defined criteria, and previously-entered data, allow the user to indicate that the clause or provision applies only to one or several line items, allow the user to add or delete clauses or provisions, allow the user to edit default values or enter information, tailor clauses without changing the clause database, incorporate any clause or provision in full text, and allow the user to compare the procurement instrument and latest versions of clauses or provisions.
2.4.2(M)	X		X			2	•	Automatically generate an initial list of attachments and exhibits for procurement instruments and award actions based upon information previously entered.
2.4.2(N)	X					2	-	Provide capability to capture documentation & data for oral solicitations.
2.4.2(O)	X	X	X			1 2	A	Automatically validate the procurement instrument or other award action for consistency & completeness & notify user of discrepancies.
2.4.2(P)	X	X				1 2	S,T	Automatically assign internal tracking numbers to in-process actions until release, automatically generate and assign the next available procurement instrument identification number per DFARS 204.70 as well as User-defined criteria and previously-entered data, and allow for automatically assigning numbers beyond the current fiscal year.
2.4.2(Q)	X	X				2	•	Allow an authorized user to indicate that the document is complete and ready to distribute, and automatically establish an issue and opening/closing date, release the solicitation after the issue date has passed, automatically reschedule dependent milestones, and prohibit changes to the document once distribution has occurred except by amendment or modification.
2.4.2(R)	X				3		-	Provide capability to provide bilateral contract action to contractor for signature.
2.4.2(S)			X			1 5		Automatically alert the Contracting Officer when a change in clauses/provisions or clause selection logic may require a solicitation amendment or contract modification, automatically reselect clauses and provisions based on changes to previously-entered data or user-defined criteria, and allow the user to incorporate any or all changes.
2.4.2(T)			X		3		-	Automatically notify all vendors on the solicitation mailing list of amendments.

SPS SOW	Iı	ncre	mei	nt	Cor	respond	ing	
Reference	1	2	3	4	MOS	MOE	CTP	STATEMENT
2.4.2(U)	X		X			2	-	Automatically convert estimated milestone delivery dates to firm dates based on user-defined criteria, allow the user to edit an in-process contract until execution, allow the user to simultaneously modify multiple contracts with a single or multiple contractors, and maintain previously-entered data unaffected by the change.
2.4.2(V)	X	X				2	-	Concurrently maintain and provide accessibility to conformed solicitation and award documents which incorporate all amendments and modifications, including those in-process, automatically identify any presentation of a conformed document, and permit the user to construct modifications showing only contract changes or including replacement pages.
2.4.2(W)	X	X				2		Prohibit an electronic signature on an award unless funding verification shows sufficient funds, and notify the user when the amount to be obligated differs from the commitment on the requirements package.
2.4.2(X)		X	X			2	•	Prohibit contract award until all milestones are met, and automatically generate contract reporting requirements, contract distribution list and profit and fee statistics based on user-defined criteria and transmit to data collection points.
2.4.3		X			3		•	CONDUCT INDUSTRY LIAISON: The system shall receive, record and schedule contractor requests for supplemental solicitation information, and receive and store critical technology clearances from requirements and foreign disclosure offices.
2.4.4								EVALUATE OFFERS
2.4.4(A)	X	X				5	L	Maintain all versions of responses, automatically notify the user of unidentifiable responses, prohibit access to information in responses until the opening/closing date and integrate with previously-entered data, and store contractor certifications.
2.4.4(B)	X					2	•	Automatically link the vendor response to the appropriate solicitation or BAA, including no-bid decisions.
2.4.4(C)		X				2	•	Provide the capability to prepare, update or revise abstract of offers showing original and each iteration of each element of abstract data.
2.4.4(D)		X			3	2	•	Automatically identify a late offer & notify user that a late offer has been received.
2.4.4(E)				X		2	•	Compare each offeror's Representations and Certifications against solicitation criteria and identify differences.
2.4.4(F)	X					2	-	Compute and compare offered prices for each line item or for the total offer and identify the apparent low offeror, allow the user to process and record resolution of exceptions to the terms and conditions of solicitation, compare solicitation and offerer's terms and conditions and notify user of any differences, indicate whether subcontracting plan has been approved, and evaluate offers based on the offer data and previously-defined criteria.
2.4.4(G)	X		X			2	-	Provide capability to integrate offer data & previously established evaluation criteria to perform evaluation.
2.4.4(H)		X				2	-	Provide the capability to prepare requests for external action as required by statute or regulation.

SPS SOW	Iı	ncre	me	nt	Cor	respond	ing	
Reference	1	2	3	4	MOS	MOE	CTP	STATEMENT
2.4.4(I)	X			X		5	L	Integrate offeror's past performance information into the evaluation process and recommend a determination of responsibility based on user-defined criteria and algorithms applied to previously entered data.
2.4.4(J)	X		X		3	2		Be able to create, request, receive and dispose of pre-award survey requests.
2.4.4(K)	X	X			3	2	W	Provide capability to receive & process unsolicited proposals & assign to appropriate user for action & track disposition.
2.4.4(L)	X	X				2	-	Provide capability to calculate incentive pricing arrangements.
2.4.4(M)	X	X	X			2	•	Provide access to tools to analyze cost and pricing data, verify mathematical calculations, develop weighted guidelines profit/fee objectives, and allow unit prices and awards in non-U.S. currencies.
2.4.4(N)	X		X			2	1	Provide capability to document multiple negotiation positions & indicate those that will be retained with contract history.
2.4.4(O)	X	X				2	-	Provide the capability to exclude an offeror from further consideration.
2.4.5								MAINTAIN A BID PROTEST CASE FILE
2.4.5(A)	X				3	2	W	Acknowledge receipt of any protests, including appeals and interventions, consolidate protest documentation into a protest case file, and create a Rule 4 index of relevant documents.
2.4.5(B)	X	X				2	•	Categorize protests, relate each issue of protest to a specific provision or requirement, and allow the user to divide and track the protest based on multiple issues.
2.4.5(C)		X			3	2	W	Provide capability to notify all interested parties concerning processing & final resolution of a protest.
2.5								ADMINISTER CONTRACTS
2.5(A)	X					2	-	Automatically calculate revised total contract dollars based on changes to dollar amounts in modification.
2.5(B)		X				2	-	Automatically identify contracts that are or become subject to CAS based on defined criteria.
2.5(C)				X		2	•	Automatically notify user when previously established criteria for contractor performance have been breached.
2.5(D)	X	X				2	-	Provide capability to track all delivery orders which are issued under indefinite quantity or indefinite-delivery contracts, accumulate quantities & notify user when minimums/maximums, based on user defined criteria, are approaching.
2.5(E)		X				2	-	Provide capability to track currency of certificate of insurance & notify user prior to expiration.
2.5(F)	X	X	X			2	-	Provide capability to track submission of payment & performance bonds & progress reports for sureties.
2.5(G)		X			3 6		B,W	Provide capability to receive shipping & pickup/release status from contractors regarding excess equipment & notify recipients of pending receipt of material.

SPS SOW	Iı	ncre	eme	nt	Cor	respond	ing	
Reference	1	2	3	4	MOS	MOE	СТР	STATEMENT
2.5(H)	X		X			1 4 5	A J K L	Automatically compare the Government-furnished property report with contract requirements and notify the user of any discrepancy, automatically verify if a solicited vendor has or had a contract for the same item for which Government property was furnished and so notify the user, and notify the user of any contractor report of GFP loss/damage/destruction.
2.5(I)	X	X	X	X		2	•	Process material review board actions and corrective action requests/notices/plans (including show-cause and cure notices).
2.5(J)	X		X			1 2 4		Track results and approvals of first article or production lot test acceptance results, automatically establish delivery schedules based on acceptance, automatically request from the contractor status of pending delivery and performance requirements, annotate and categorize a response or non-response to such a notice, receive and track contract performance reports and activity data, determine factors of nonconformance and relate to contractual provisions, notify the user when performance parameters do not meet user-defined criteria, and track the physical progress review and notify users of results based on user-defined milestones.
2.5(K)			X			2	•	Process shipment and performance data against the MILSTRIP requisition number and contract schedule, and allow the user to establish and modify forecasted delivery dates.
2.5(L)			X			2	-	Automatically compare payment requests with acceptance status and previously- entered data to validate the request for consistency and correctness.
2.5(M)			X		6	2	В	Automatically calculate payment amount including withholdings, reject invalid payment requests and so notify the submitter and user, establish payment limitation based on contract terms and conditions, manually or automatically release payment authorizations to the payment office based on user-defined criteria, automatically notify the user when a payment request does not specify which ACRN applies to the payment request, and designate the appropriate ACRN or appropriation against a payment request.
2.5(N)			X			2 4	J K	Permit notification when no indication has been received within a user-defined time period of a payment record corresponding to a payment/contract/contractor, automatically notify the user whenever the payment office rejects an authorized request for payment, and automatically notify the user if the percentage of progress payments requested exceeds the recorded progress.
2.5(O)	X	X	X	X		2 4		Record and track committed funds for pending and established contract vehicles (including those funds provided to another organization), view and compare obligations/payment authorizations/payments on a CLIN and ACRN basis, and access funding allocations/appropriations/commitments/(de)obligations/disbursements associated with the contract from external sources.
2.5(P)	X				3	1 2	A W	Automatically verify that final settlement reflects previous partial settlements, consolidate claim documentation into a Rule 4 file, and track the claim based on multiple disputed issues.
2.5(Q)			X		3	2	-	Provide capability to authorize an equitable adjustment to exceed the award amount only in accordance with a variation-in-quantity clause in the procurement instrument or award action IAW with 52.212.11
2.5(R)	X	X				2 5	L	Permit the user to identify individual line items/quantities/contracts as terminated, track reprocurement costs resulting therefrom, and rescind the termination and reflect in performance history and statistics.

SPS SOW	I	ncre	eme	nt	Cor	respond	ing	
Reference	1	2	3	4	MOS	MOE	CTP	STATEMENT
2.5(S)	X	X	X	X		2 5	L	Automatically closeout contracts and other award vehicles in accordance with user-defined criteria, identify missing closeout documentation based on contract completion checklist and notify appropriate users, identify and archive contracts which have passed their retention period, allow the user to change the retention period for specific contract(s), access any section of a closed-out contract file during the retention period based on user-defined criteria, reactivate any undestroyed procurement instrument or award action, and automatically extract and retain summary data prior to destroying the contract file to support future analysis based on user-defined criteria.
2.6								OVERSEE PROCUREMENT PROCESSES
2.6.1								ANALYZE PROCUREMENT PERFORMANCE
2.6.1(A)	X	X				2	-	Automatically calculate procurement administrative lead time based on user defined criteria & previously entered data.
2.6.1(B)	X					2	-	Establish standard metrics associated with the procurement process, and calculate measured performance based on these metrics.
2.6.1(C)	X		X			5	L	Provide the capability to capture, store, measure and report the results of tracking data associated with standard metrics generated during the procurement process, and allow for entry and storage of customer feedback.
2.6.2								MANAGE WORKLOAD
2.6.2(A)	X	X				2	•	Permit an authorized user to assign and reassign work to others within the user's authority, access specific information on user expertise and commodities certifications to assign workload, establish criteria for workload assignment, workload based on user-defined criteria, automatically assign changes to previously-assigned workload to current owner, and transfer ownership of documents or actions based on user-profile criteria.
2.6.2(B)	X	X				2	-	Delegate and track contracts to multiple users to perform specific contract administration functions, permit authorized personnel to reassign workload between organizations subject to mutual agreement, perform multiple redelegations of functions and trace to previous delegations, assign workload outside the established user-defined criteria, allow assignment of workload to a team leader.
2.6.2(C)		X				2	-	Automatically notify user whenever additions, changes, problems, or major events occur that affect items in the user's workload.
2.7								ADMINISTRATIVE SUPPORT
2.7(A)	X					2	-	Track Contracting Officer warrants and link to user profiles, identify each user's accesses/authorizations/permissions to perform various system functions, and permit an authorized user to create, modify, suspend or delete a user profile.
2.7(B)	X	X	X			2	-	Create or modify Memoranda of Agreement (MOA) and establish a record of tasks, funds, hours, and designated individuals, projects or contracts which will accrue charges based on information in the MOA.

SPS SOW	I	ncre	eme	nt	Corresponding			
Reference	1	2	3	4	MOS	MOE	СТР	STATEMENT
2.7(C)	X					2		Calculate reimbursements due from non-defense organizations based on hours expended and the rate for each skill category in accordance with user-defined criteria.

Legend - MOS (Measure of Suitability)/ MOE (Measure of Effectiveness) Columns

- 1 MOE Data
- 2 MOE Functionality
- 3 MOS EC/EDI
- 4 MOE Reporting
- 5 MOE On-line Historical Information
- 6 MOS Interoperability
- 7 MOS Data Standardization
- 8 MOE Information Warfare Activities

None for System Availability, Site Reliability, Data Recovery and Restoration, System Supportability Surge Capability, or Technical Supportability

Legend - CTP (Critical Technical Parameters) column

- A Accuracy Operational data
- B Interoperability Non-procurement legacy systems
- C Interoperability (Data standardization) Accept and process standard data
- D Security Unauthorized access and intrusion
- E Security Acceptance according to authorization and privileges
- F Security Rejection of incorrect passwords/IDs
- G Security Rejection of incorrect functional attempts
- H Security Log-off after selected time-out duration
- I Security Protection (rejection of unauthorized attempts)
- J Timeliness Mandatory contract reporting
- K Timeliness Ad hoc management reports
- L Timeliness On-line capability to receive, store, and retain historical audit information
- M Response time Indicator that the task or function has started
- N Response time Ready to receive new command after exiting prior command
- O Response Time Allows subsequent user commands after task or function completion
- P Processing Time For task or function to be completed, operational database updated, and user presented with indication
- Q Data Relevance Operational data
- R Data Currency Operational data
- S Data Edits Identify errors and reject incorrectly entered data
- T Data Entry Single data entry
- U Data Integrity Read-only data
- V Data Integrity Changeable data
- W EC/EDI EC/EDI information generated by SPS